NOTE TO USERS

This reproduction is the best copy available.

UMI®

University of Alberta

The Socioeconomic Attainment of 30-year-old Immigrant Women in Canada in 2001

by

MD KAMRUL ISLAM

©

A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of

Master of Arts

DEPARTMENT OF SOCIOLOGY

Edmonton, Alberta
Fall 2008

Library and Archives Canada

Published Heritage Branch

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque et Archives Canada

Direction du Patrimoine de l'édition

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence
ISBN: 978-0-494-46962-0
Our file Notre référence
ISBN: 978-0-494-46962-0

NOTICE:
The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

AVIS:
L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canada

ABSTRACT

Using data from the Canada Census 2001, this study examined the socioeconomic attainment of 30-year old immigrant women in Canada in 2001 in comparison to the native born women. In addition, income attainment of 30-year old child immigrant women, teen immigrant women and second generation women was compared with that of women of the third generation and over of the same age group. Multivariate statistical techniques were used to analyze the data and to test the research hypotheses. Overall, it was found that child immigrant women had higher educational attainment, higher occupational prestige and higher income attainment at age 30 compared to teen immigrant women. Moreover, both child immigrant women and teen immigrant women had higher income attainment than women of the third generation and over. Second generation women also had higher income attainment compared to women of the third generation and over. In addition, it was found that visible minority immigrant women had lower educational attainment, lower occupational prestige and lower income attainment compared to not visible minority immigrant women. Finally, child immigrant women of visible minority had higher educational attainment, higher occupational prestige and higher income attainment compared to teen immigrant women of not visible minority, which suggests that age at immigration is a strong determinant of socioeconomic attainment for immigrant women.

Key words: age at immigration, child immigrant, teen immigrant, second generation, and socioeconomic attainment

ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to all who have assisted and supported me in the completion of this thesis either directly or indirectly. First and foremost, I would like to thank my supervisor, Professor Frank Trovato, for his never ending guidance and support. He pushed me to extend my ideas and gave me the impetus and courage to pursue them. I appreciate the spontaneous sharing of his knowledge and expertise which made this thesis far better. Despite his busy schedule, he managed to make me meet deadlines without the quality of my outputs being sacrificed.

Secondly, I would like to thank my co-supervisors Professor Herbert C. Northcott and Professor Joe Wu. I am indebted to them and particularly grateful for their invaluable advice, continual support and enthusiastic encouragement throughout the course of this research.

I am also extremely grateful to Lynn Van Reede who has provided me with continuous excellent cooperation and administrative support in the completion of this thesis. I would also like to thank my friends and classmates especially Manoj and Josh who have shared their knowledge and ideas related to my thesis. Finally, I express my deepest gratitude to my family for their support with love and understanding.

Dedication

To my best friend and wife Mila for her loving support, understanding, and patience over the duration of this thesis.

List of Contents

Chapters **Page no.**

Chapter 1: 01 - 14

1.1 Introduction.....01

1.2 Relevant theoretical perspectives.....07

1.3 The "straight-line assimilation" theory.....10

1.4 "Second- generation" decline.....12

1.5 Segmented Assimilation Theory.....14

Chapter 2

2.1 Review of literature..... 17 – 31

Chapter 3 32-42

3.1 Theoretical framework.....32

3.1 Socioeconomic attainment of immigrant women in Canada.....32

3.2 Comparison of income attainment by generation status.....36

3.3 Socioeconomic attainment of immigrant women of visible minority.....40

3.4 Hypothesis.....42

Chapter 4 43 – 52

4. Data and Methodology.....43

4.1 Data.....43

4.2 Methodology.....43

4.3 Sample Characteristics.....51

Chapter 5 53-72

5. Findings of the study.....53

5.1 Bivariate Analyses.....53

5.1.1 Association between age at immigration and level of education 53

5.1.2 Association between age at immigration and occupational prestige.....53

5.1.3 Association between age at immigration and level of income.....54

5.1.4 Comparison of income attainment by generation status.....54

5.1.5 Age at immigration and level of education for visible minority women.....55

5.1.6 Age at immigration and occupational prestige for visible minority women.....56

5.1.7 Age at immigration and income attainment of visible minority women.....56

5.1.8 Educational attainment by visible minority status.....57

5.1.9 Occupational prestige by visible minority status.....57

5.1.10 Income attainment of immigrant women by visible minority status.....57

5.2. Multivariate Analyses.....58

5.2.1 Educational attainment of 30-years old immigrant women in 2001.....58

5.2.2 Occupational prestige of 30-years old immigrant women in 2001.....59

5.2.3 Income of 30-years old immigrant women in 2001.....60

5.3. Comparison of income attainment by generation status.....62

5.3.1 Income attainment of child immigrant women and teen immigrant women with that of women of the third generation and over.....62

5.3.2 Comparison of income attainment between the second generation women and women of the third generation and over.....64

5.3.3 Comparison of income attainment by country/region of origin.....65

5.4. Socioeconomic attainment of immigrant women by visible minority 67

5.4.1Educational attainment of immigrant women of visible minority 67

5.4.2 Occupational prestige of immigrant women of visible minority.....68

5.4.3 Income attainment of 30-year-old visible minority immigrant women 68

5.5. Socioeconomic attainment: Interaction between age at immigration and visible minority status.....69

5.5.1. Socioeconomic attainment: visible minority versus not visible minority.....69

5.5.2 Socioeconomic attainment: Interaction effect.....71

Chapter 6 73 - 79

6. Discussion.....73

6.1 The impact of age at immigration on the socioeconomic attainment of immigrant women.....73

6.2 Income attainment: First generation versus third generation and over.....74

6.3 Income attainment: Second generation versus third generation and over.....75

6.4 Comparison of income attainment by country/region of birth.....76

6.5 Socioeconomic attainment: visible minority versus not visible minority.....78

6.6 Socioeconomic attainment: Age at immigration and visible minority status.....78

Chapter 7 80 - 83

7. 1 Conclusion.....80

7.2 Limitations and recommendations.....82

References.....84 – 94

List of Figures: 95 - 98

Figure 1: Conceptual framework for immigrant women of 30-years old.....95

Figure 2: Conceptual framework: Generation status model 96

Figure 3: Conceptual framework: Visible minority model (Immigrants only).....97

Figure 4: Comparison between study groups and the standard group.....98

List of Tables: 99 -125

Table 1: Sample characteristics: 30-year old women in 2001 Census.....99

Table 2: Age at immigration and level of education (in per cent).....100

Table 3: Age at immigration and occupational prestige (in per cent).....100

Table 4: Age at immigration and level of income (in per cent).....100

Table 5: Generation status and Level of income (in per cent).....101

Table 6: Age at Immigration and level of education for visible minority women.....101

Table 7: Age at Immigration and occupational prestige for visible minority women.....101

Table 8: Age at Immigration and level of income for visible minority women.....102

Table 9: Educational attainment by visible minority status.....102

Table 10: Occupational prestige by visible minority status.....102

Table 11: Income attainment by visible minority status.....103

Table 12: Educational attainment of 30-year-old immigrant women in 2001.....104

Table 13: Occupational prestige of 30-year-old immigrant women in 2001.....105

Table 14: Income attainment of 30-year-old immigrant women.....106

Table 15: Income attainment of child immigrant women in 2001.....107

Table 16: Income attainment of teen immigrant women in 2001.....108

Table 17: Income of third+ generation women in 2001.....109

Table 18: Comparison of income attainment between child immigrant women and 3rd+ generation women.....110

Table 19: Comparison of income attainment between teen immigrant women and women of 3rd+ generation.....111

Table 20: Income of Second generation women in 2001.....112

Table 21: Comparison of income attainment between 2nd generation women and women of third generation and over.....113

Table 22: Test of significance (t-test) for the difference of slopes.....114

Table 23: Comparison of income attainment between immigrant women born in USA and women of third generation and over.....115

Table 24: Comparison of income attainment between immigrant women born in Europe, and women of third generation and over.....116

Table 25: Comparison of income attainment between immigrant women born in Asia, and women of third generation and over.....117

Table 26: Comparison of income attainment between immigrant women born in Africa, and women of third generation and over.....118

Table 27: Comparison of income attainment between immigrant women born in Other, and women of third generation and over.....119

Table 28: Educational attainment of 30-year-old immigrant women of visible minority 120

Table 29: Occupational prestige of 30-year-old immigrant women of visible minority 121

Table 30: Income attainment of 30-year-old immigrant women of visible minority.....122

Table 31: Educational attainment: Interaction of age at immigration and visible minority status.....123

Table 32: Occupational prestige: Interaction of age at immigration and visible minority status.....124

Table 33: Income attainment: Interaction of age at immigration and visible minority status.....125

Appendix A.....126- 129

The Socioeconomic attainment of 30-year-old immigrant women in Canada in 2001

Chapter 1

1.1 Introduction

Canada is one of the highest migrant receiving countries in the world. "In the past 130 years of Canadian history, approximately 11 million immigrants have entered in the country. In the early part of the twentieth century, over 20 percent of the Canadian population was foreign-born" (Trovato and Grindstaff, 1986: 569). In the early twenty-first century, the proportion of foreign-born was the highest in 70 years, at 18.4 % of the total population in 2001 (Statistics Canada, 2003). The volume and diversity of immigrants in Canada have increased in recent years under different categories of immigration (i.e., skilled workers category, business category, family class immigrants and refugees). These immigrants do face various problems in establishing themselves in the job market in Canada. For this reason Ram and Shin (1999) argue that "the growing visibility, lack of assimilation, and economic deprivation of new immigrants have become a focus of increased attention and public concern" (1999:148).

Research in Canada and the United States concerning immigrants has explored a variety of issues and concerns. One aspect of this literature has looked at socioeconomic attainment of immigrants and their dependents (Boyd, 2002; Boyd and Grieco, 1998, Kao, 2004; and Feliciano, 2005). Several studies (e.g., Gans, 1992; Massey, 1995; Portes and Zhou, 1995) have focused on the dynamics of integration of immigrants with the mainstream receiving society. However, limited attention has been devoted specifically to the socioeconomic attainment of immigrant women in Canada. In general, Canadian

studies on the first generation immigrants show that first generation immigrants have lower levels of socioeconomic attainment than that of the native-born population

(Statistics Canada, 2007; Warman and Worswick, 2004; Edmonston, 2002; Trovato and Grindstaff, 1986). On the other hand, studies of the second generation immigrants in Canada show that the second generation immigrants have higher levels of socioeconomic attainment than that of the native-born population (i.e., Boyd, 2002; Boyd and Grieco, 1998). However, differences in socioeconomic attainment of immigrants are related to a host of Sociodemographic factors including age at immigration, duration since immigration, ethnicity, country of origin, and cultural background.

In this research, the impact of age at immigration on the socioeconomic attainment of 30-year old immigrant women in Canada in 2001 was examined using data from Census 2001. Socioeconomic attainment was assessed in terms of education, occupational prestige, and income. The research was guided by the question: for immigrant women, does the age at immigration to Canada have an impact on their socioeconomic attainment at age 30? The hypothesis which was tested in this research was that among immigrant women, age at immigration was inversely related to socioeconomic attainment. In other words, the expectation is that immigrant women that moved to Canada as children below age 13, will do better socioeconomically than immigrant women who came to Canada at the age of 13 years or more. The underlying causal dynamics for this relationship are explained later (Figure 1).

Therefore, it raises the question why does age at immigration matter for the socioeconomic attainment of immigrants? For socioeconomic attainment of immigrants age at immigration is an important variable, which has both direct and indirect impacts.

Schaafsma and Sweetman (2001) described the effect of age at immigration on immigrants' earnings in Canada using data from the public use 1986, 1991, 1996 Canadian census microdata files. They found that those who immigrated later in life, experience lower returns to both foreign labour market experience and foreign education than those who immigrated earlier in life. The authors argued that their schooling obtained in the source country was not recognized as equivalent to schooling in the host country, which in turn leads to lower return. The authors further added that older immigrants were less able to adjust to the linguistic and cultural challenges associated with the host society, which made it difficult for them to generate earnings commensurate with their formal educational and occupational skills.

Moreover, the pattern of acculturation into the host society differs significantly for immigrants according to their age at immigration. Those immigrants who come to Canada at an earlier age (i.e., below 13 years) exhibit higher acculturation into the mainstream society. In addition, earlier arrivals exhibit higher assimilation in terms of educational attainment, occupational prestige and income attainment than later arrivals. For this reason, it is important to look at the age at immigration to predict socioeconomic attainment of immigrants. If that is so we may now ask why earlier immigrants exhibit higher assimilation in terms of socioeconomic attainment than later arrivals. Those who immigrate at an earlier age have higher ability to learn English/French, which facilitates higher educational attainment as an adult. In addition, parents have higher expectation of their children for educational attainment, which in turn leads to higher educational attainment for child immigrants. This causal mechanism is explained in detail later in the theoretical framework (Figure 1).

Another aspect of this study is that income attainment of 30-year old immigrant women and second generation women were examined in comparison to women of third generation and over (native-born women) of the same age group. The assumption was that both child immigrant women and teen immigrant women would have lower income attainment at age 30 compared to women of third generation and over, of the same age group. For the second generation, it was hypothesized that second generation women would have higher income attainment at age 30 compared to women of third generation and over, of the same age group. The underlying causal mechanism is explained in Figure 2.

There are several reasons for examining the income attainment of the second generation. First, the second generation is considered as a bridge between the culture of first generation immigrants and the culture of the host society. Socioeconomic attainment of first generation and their cultural background have a profound impact on the socioeconomic attainment of the second generation. Second, the second generation has the advantage of higher language proficiency in English/French than that of their immigrant parents. Another advantage of the second generation is that they generally obtain their educational degrees in Canada, which are highly recognized. Although the first generation has several barriers (i.e., lower proficiency in English/French, lack of recognition for their educational credentials) to enter the job market the second generation does not have such barriers to enter the job market. Despite these advantages, in many cases, the second generation experiences the problems of racism and discrimination, which might obstruct their assimilation into the host society. Therefore, it is important to examine to what extent the second generation are able to overcome the

barriers experienced by their immigrant parents; and to what extent they are able to assimilate in terms of income attainment into the mainstream Canadian society.

In addition to the income attainment of the second generation women, the income attainment of 30-year old immigrant women of different regional origins (i.e., born in USA, Europe, Asia, Africa and Others) was also examined in relation to the women of third generation and over. What is the significance of regional origin for immigrant women in income attainment? The demographic composition of Canada has changed over the last three decades from European immigrants to immigrants from Asia and other regions. Prior to the 1960s, the majority of immigrants came to Canada from European countries (e.g., Britain, Germany, Ukraine, and Hungary). However, due to the changes to immigration policy in 1960s and 1970s, a substantial number of immigrants are coming to Canada from Asia and other regions (e.g., China, and India). Because of the change in source countries, the number of ethnicities, cultures and languages has increased in the Canadian population (Janitzen, 2008). What is most important for immigrants socioeconomic attainment is that the shift in source countries from English speaking to non-English speaking. Another important factor is that immigrants from non-English speaking countries have different cultural characteristics. Therefore, the socioeconomic attainment of immigrant women will differ significantly based on their country/region of birth. For this reason, immigrant women' country/region of birth was taken into account to predict their income attainment at age 30. This enables us to explore the causal mechanism for the differential income attainment of immigrant women based on country/region of birth.

Moreover, in this research, the impact of age at immigration on the socioeconomic attainment of 30-year old immigrant women of visible minority was examined. The assumption was that child immigrant women of visible minority would have higher socioeconomic attainment in terms of education, occupational prestige and income at age 30 compared to teen immigrant women of visible minority, of the same age group (Figure 3). In addition, the interaction effect of age at immigration and visible minority status on the socioeconomic attainment 30-year old immigrant women was also examined in this research. Teen immigrant women of not visible minority have been used as the reference category to examine the interaction effect of age at immigration and visible minority status. For interaction effect, the assumption was that child immigrant women of visible minority and teen immigrant women of visible minority would have lower socioeconomic attainment at age 30 compared to teen immigrant women of not visible minority. The underlying causal mechanism is explained in Figure 3.

Due to the changes in immigration policies back in the 1960s and 1970s, the majority of the immigrants came from Asian than from Europe. This has gradually led "visible minorities"[1] to transform into the dominant category in post-1970s immigration flows. Boyd (2008: 21) argued that, "the increasing numbers of visible minorities among Canada's immigrants generates concern that immigrants face ethnic and racial discrimination, particularly in the labour market; it also raises the possibility that the visible-minority second generation also will face greater challenges in the labour market compared with the non-visible minority second generation or the third-plus generation. If

[1] "The term *visible minority* was developed by the Canadian federal government to meet data needs of federal employment equity legislation in the 1980s. Designated groups include Black, South Asian, Chinese, Korean, Japanese, South East Asian, Filipini, other Pacific Islanders, West Asian, Arab and Latin American" (Boyd 2008:21).

being a visible minority negatively influences social and labour market outcomes beyond the first generation, then visible minority second generation groups may have lower levels of educational and occupational attainments. They also may earn less than non-visible minority groups, in which the white population predominates". Moreover, there is overwhelming evidence that visible minority immigrants have lower socioeconomic attainment compared to non-visible minorities (i.e., Walters et al., 2007; Li and Dong, 2007; Hou and Balakrishnan, 1996; Bavavarajappa and Jones, 1999). Therefore, analysis of income attainment of immigrant women of visible minority bears greater significance in the context of Canadian society.

Immigrant women of 30 years of age in 2001 have been selected for the study because 30 years of age is a crucial age for women since by this age many women have completed their education, have entered the labour force, and are likely to be in a marital union or in a cohabiting relationship. As well, many women at this age may be having their first or second child. Thus, age 30 represents an important juncture in the lives of women. This age is an important point of the life cycle for immigrant women and at which to assess their socioeconomic position (Trovato and Grindstaff, 1986).

1.2 Relevant Theoretical perspectives

Various theories have been developed to explain immigrants' acculturation and assimilation into the mainstream society. One of these theories was developed by Milton M. Gordon (1964) in his Assimilation in American Life: The Role of Race, Religion, and National Origins. Gordon (1964:70-75) described seven types of assimilation which are as follows:

(1) Cultural or behavioral assimilation: Cultural assimilation is the first type of assimilation that has been defined as the change of cultural pattern among immigrants over time to those of the host society. In fact, cultural assimilation paves the way for other types of assimilation into the host society.

(2) Structural assimilation: Structural assimilation is one of the most important types of assimilation that has been defined as "the large-scale entrance into cliques, clubs, and institutions of host society, on a primary group level". At this stage, immigrants start to play an active role in various institutions of the core society which facilitate marital assimilation of immigrants to the host society.

(3) Marital assimilation: This is the large-scale intermarriage between immigrants of various ethnic groups. This is the stage which leads to identical assimilation discussed below. However, there are some conservative ethnic groups who like to preserve their own cultural and religious identity, and usually try to avoid large-scale intermarriage.

(4) Identical assimilation: Identical assimilation demonstrates that people become more assimilated into the host society and a sense of peoplehood develops which is based exclusively on the host society.

(5) Attitude receptional assimilation: Attitude receptional assimilation takes place when cultural assimilation occurs among immigrants. Attitude receptional assimilation is characterized by the absence of prejudice.

(6) Behavior receptional assimilation: Behavior receptional assimilation is characterized by the absence of discrimination. This is the stage where "cultural pluralism" takes place.

(7) Civic assimilation: Civic assimilation is defined as the absence of value and power conflict in the host society.

According to Gordon's (1964) account, cultural assimilation or acculturation may takes place when none of the other types of assimilation occurs and may continue indefinitely. Moreover, when structural assimilation takes place, all other types of assimilation will naturally follow. In addition, Gordon argued, "not only is the assimilation process mainly a matter of degree, but, obviously, each of the stages or subprocesses distinguished above may take place in varying degrees" (Gordon 1964:71). However, one important limitation of Gordon's (1964) theoretical perspective of assimilation is that he did not address the occupational mobility and economic assimilation of immigrants. Alba and Nee (1997) argued,

> "Yet this kind of assimilation is of paramount significance, both in itself, because parity of life chances with natives is a critical indicator of the decline of ethnic boundaries, and for the reason that entry into the occupational and economic mainstream has undoubtedly provided many ethics with a motive for social (i.e., structural in Gordon's sense) assimilation. Furthermore, socioeconomic mobility creates the social conditions conducive to other forms of assimilation since it likely results in equal status contact across ethnic lines in workplaces and neighborhoods" (Alba and Nee 1997:835).

Despite this limitation, Gordon's theoretical perspective of immigrants' assimilation and acculturation has paved the way for further development and modification of theories related with immigrants' acculturation and assimilation.

1.3 The "straight-line assimilation" theory

The "straight-line assimilation" or "linear" theory of assimilation suggests that immigrants' offspring become more integrated with the host society over time in terms of behavioural and socioeconomic characteristics. As a result, it becomes impossible to distinguish second generation and third generation immigrants from that of the native-born population (Gans, 1973, 1992; Sandberg 1973; Lieberson 1973).

However, in many cases, previous research shows that the successive generations of immigrants did not exhibit the linear pattern of assimilation into the mainstream society. On this point, Alba and Nee (1997) argued that,

> "Implied is the idea that generations are the motor for ethnic change, not just the time frame within which assimilation takes place. Each generation faces a distinctive set of issues in its relationship to the larger society and to the ethnic group, and their resolution brings about a distinctive pattern of accommodation. The idea of the generational inevitability of assimilation has been criticized, however, for assuming that all ethnic content is imported by immigrants and not recognizing that it can be created in response to conditions and out of cultural materials in the host society" (Alba and Nee 1997: 832).

As a result, the theory of "straight-line assimilation" was criticized by researchers (i.e. Glazer and Moynihan 1970; Greely 1977; Conzen et al., 1992) over the decades. Due to the extensive criticism of the "Straight-line Assimilation" theory, Gans (1992) suggests:

"To be sure, the line of the theory has not always been straight, and 'bumpy-line' theory might be a more apt term. Moreover, the line will not necessarily 'decline' into final and complete assimilation and acculturation, and it is possible, perhaps even likely, that ethnic groups reach plateau after several generations in which they still name themselves as members of an ethnic groups but indulge mainly in a familial and leisure-time ethnicity, that I have called symbolic (Gans 1979). Finally, changing economic and political conditions can produce general 'returns', or at least interruptions in acculturation and assimilation process, although the history of the descendants of the 1880-1925 immigrants suggests that straight- or bumpy-line theory operates quite independently of the economy, with assimilation and acculturation continuing even during economic downturns" (Gans 1992: 175).

Alba and Nee (1997) introduced a modified version of assimilation theory taking into account socioeconomic and spatial dimensions of assimilation. They defined socioeconomic assimilation as: (1) the attainment of average or above average socioeconomic standing measured by education, occupation and income. Similar definition of socioeconomic assimilation was used by Neidert and Farley (1985) and Warner and Srole (1945); and (2) as minority participation in labor market and education on the basis of parity with native groups of similar background. The authors argued that first type of socioeconomic assimilation emphasized equality of attainment or position whereas the second type of assimilation focused on equality of treatment, which advocates for the same life chances in high-status jobs and higher education for members of the immigrant minority. They added that second type of socioeconomic assimilation

allows for "segmented assimilation" which was introduced by Portes and Zhou (1993). For example, Alba and Nee (1997) examined the socioeconomic and residential assimilation of recent immigrant groups and found evidence of uneven assimilation[2] into the mainstream society. Irrespective of this, they argued that assimilation theory had not lost its utility for the study of contemporary immigration to the United States.

1.4 "Second-generation decline"

The "second-generation decline" explanation was introduced by Gans (1992) in discussing positive and negative scenarios for the future of the children of the post-1965 immigrants in America. It was hypothesized that a significant number of the children of poor immigrants in America, especially ethnic minorities, would not get jobs in the mainstream economy because of educational failure, the stalling of ethnic succession, and niche shrinkage. The author argues that majority of the European immigrants were employed in relatively secure but low-status blue- and white-color jobs. The second generation was also employed in this sector to a large extent. The author added that many of these low-status blue-and white-color jobs had disappeared, either moving out of the United States into lower wage countries, or being eliminated altogether by the invention of labor saving technologies. Thus, the author assumes, the ethnic succession scenario might be coming to an end in the manufacturing sector. The author concluded that when access to better jobs would be difficult, ethnic succession would start to slow down, which would eventually lead to lower level of socioeconomic attainment for the second generation.

[2] The uneven assimilation denotes that the pattern of assimilation for different ethnic groups (i.e., European, Asian etc.) were not same. Some ethnic groups experience upward mobility whereas some ethnic groups experience downward mobility (Alba and Nee, 1997).

Gans (1992) added that another alternative for the second-generation to improve their socioeconomic attainment was to remain and improve the economic niches that their parents occupied when they came to Canada. Many children of the European immigrants were involved in parental retail stores, and contracting businesses. The authors further added that immigrants' establishments were growing modestly, and, in many cases, the second generation became the owners of immigrant establishments. They were in a position to hire Blacks, Hispanics, and others to do the work that required long hours and physical labour. However, during the economic recession, immigrant niches were affected. Many loyal customers preferred to shop in superstores. In addition, due to the competition in the job market, immigrant niches were not able to provide decent wages for their employees. The author predicted that all these factors would lead to shrinkage of immigrant niches, which in turn would lead to the decline of socioeconomic attainment for second generation.

In addition, Gans (1992) predicts that the children of illegal and undocumented immigrants are most likely to exhibit the fate of "second-generation decline". In addition, others that might experience the "second-generation decline" would include not only the poor young men with dark skin but also poor young Asians and whites of the second generation. Regarding the ultimate consequences of the "second-generation decline" in American society, the author predicts unemployment among second-generation, the probability of more crime, alcoholism, drug use and the frustration of rising expectations.

However, recent studies on the socioeconomic attainment of second generation in Canada (i.e., Boyd and Grieco, 1998; Boyd, 2002) did not find any evidence of "second-generation decline". Boyd and Grieco (1998) argued that the Canadian studies

highlighted the achievement of Canadian adults against the American trend of focusing on children, teenagers, or young adults. The authors argued that the difference between the socio-economic achievements of Canadian and United States second generation immigrants differ with respect to the demographic complexion of immigration flows, and historically rooted societal settings. They added that the US has different source countries of drawing immigrants though both countries have experienced substantial declines in European origin flows. Whereas the majority of immigrants in the United States come from Mexican, Caribbean, and South American countries, the immigrant flow in Canada is dominated by South Asia and Southeast Asian countries. The authors maintained that the above mentioned causes might well result in the difference of socioeconomic outcomes for immigrant groups and their descendants.

1.5 Segmented Assimilation Theory

Various studies have been conducted in the United States to examine the immigrants' assimilation into the mainstream society. One aspect of this literature has looked at the pattern of assimilation for second generation in United States (i.e., Portes and Zhou 1993, Portes 1995, Portes and Zhou 1996, Portes 1997, Portes and Rumbaut 2005, Portes et al. 2005, Portes 2007). In general, the findings of these studies shows that the second generation did not exhibit the pattern of "straight-line" assimilation into the mainstream society and, in many cases, they found it difficult to assimilate into the mainstream society. Portes and Zhou (1993) states,

> "Growing up in an immigrant family has always been difficult, as individuals are torn by conflicting social and cultural demands while they face the challenge of entry into an unfamiliar and frequently hostile world. And yet the difficulties are

not always the same. The process of growing up American oscillates between smooth acceptance and traumatic confrontation depending on the characteristics that immigrants and their children bring along and the social context that receives them" (p.75).

Portes and Zhou (1993) examined the assimilation pattern of Mexican and Mexican Americans of Central California, Punjabi Sikhs in California, and Caribbean youths of South Florida. Overall, they found two patterns of assimilation into the mainstream society for the second generation. First, some groups of second generation exhibited remarkable socioeconomic advancement accompanied by deliberate preservation of ethnic membership and values. These groups maintained continuous economic attachment with their ethnic communities. Second, some groups of second generation who were visibly distinct from the majority (white) experienced a lower level of socioeconomic attainment which ultimately led to permanent poverty and assimilation into the underclass. Caribbean youths were the example of this pattern of assimilation. These patterns of assimilation were defined as "segmented assimilation" (Portes and Zhou 1993, Portes 1995, and Portes 1997).

This pattern of segmented assimilation has raises the question of what factors lead to the downward trend of socioeconomic attainment for second generation. Portes (1995) mentioned that some of the previous research has commonly referred to group differences in material resources and educational and occupational skills as the basis for downward or upward mobility of the second generation (i.e., Chiswick 1978, Borjas 1987).

This research was conducted using the modified version of "straight-line" assimilation theory introduced by Alba and Nee (1997). Socioeconomic assimilation in

terms of education, occupation and income of 30-year old immigrant women in Canada was examined in relation to women of the third generation and over. Moreover, income attainment of the second generation women was also examined in relation to women of the third generation and over. This section would enable us to predict whether the approach of the "second-generation" decline introduced by Gans (1992) is applicable in the context of Canada. Finally, in this research, the socioeconomic attainment of immigrant women of visible minority was examined using "segmented-assimilation" theory introduced by Portes and Zhou (1993).

Chapter 2

2.1 Review of literature

Trovato and Grindstaff (1986) argued that duration of immigration is an important factor for immigrants' socioeconomic attainment. They examined the economic status of thirty-year-old immigrant women in relation to the native-born Canadian women using 1981 census data. They looked at income, education, and occupation to assess economic status at age 30. They tested the hypothesis that women who migrated to Canada as adolescents or in their early adult years, as opposed to females who came to this country during their childhood, will demonstrate a lower level of economic success in relation to native-born women. Overall, it was shown that the degree of economic achievement, as measured by income, occupation, and education, were comparatively lower for later arrivals than early arrivals and for immigrant women in relation to native-born women. For instance, nonimmigrant women ranked first in the proportion of having a professional career (33%), and among immigrant women, those who migrated to Canada during their childhood had a higher level of economic status than those who had migrated during their adolescence. The latter were notably disadvantaged in terms of educational and occupational attainment: only 9 percent had university, and only 18 percent were professional. Furthermore, Trovato and Grindstaff (1986) showed that economic status of immigrant women differed significantly on the basis of marital status, ethnicity, and number of children ever born. The degree of economic achievement was twice as high for single immigrant women as compared to ever-married immigrant females at age thirty. The ethnic differences between persons of immigrant and nonimmigrant origins were generally minimal with respect to university education and income attainment. For every

comparison, immigrant women with larger family size had the lower proportion of educational, occupational and income achievement. Trovato and Grindstaff (1986) suggested that for ever-married immigrant women, number of children in the family was an important predictor of economic outcome.

Picot et al. (2008) examined the chronic low income and low-income dynamics among recent immigrants in Canada by using the Longitudinal Administrative Database (LAD) and the Longitudinal Immigration Database (IMDB) data. In 2002, the prevalence of low-income among immigrants during their first full year in Canada was 3.5 times higher than those of Canadian-born people. By 2004, this was 3.2 times higher. Overall, it was shown that the recent immigrants have higher prevalence of low-income than those of long-term immigrants. This suggests that recent immigrants', who had been in Canada only one or two years, had more problems adjusting over the short-term. Therefore the large increase in educational attainment of new immigrants, and a certain proportion of skilled class immigrant, had only a small impact on immigrants' likelihood of being in low income. The probability of entering a period of low income was very high for immigrants during their first year in Canada. It ranged from 34% to 46% depending upon their year of arrival. The difference in income was attributed in part to the year of arrival. Since employment opportunities do vary from year to year, immigrants' year of arrival is important to assess their relative income. Among other factors that were believed to be associated with the decline in earnings of recent immigrants include higher proportion of immigrants from Asia, lower proficiency in English, lower quality of education, increased discrimination among visible minority groups, and deteriorating labour market outcomes (Picot: 2004) . One of the limitations of the study is that he has only looked at

the recent immigrants. They did not focus on the immigrants with longer duration in Canada. With increasing duration of residence in Canada, immigrants' socioeconomic attainment starts to converge with that of the Canadian-born population. However, it is also important to look at the effect of age at immigration on immigrants' socioeconomic attainment. Previous research shows that age at immigration is negatively associated with their income.

Inbar and Adler (1976) examined the impact of age at immigration on college attendance among 238 children of immigrants in Israel and France. Overall, they found that age at immigration is a strong determinant of educational attainment. Older immigrants (12 years or more at immigration) were likely to attain higher education than younger immigrants (less than 12 years at immigration). In particular, they found that 6-11 years of age at immigration was more vulnerable to crises in their environment. They argue that "the older a child, the less his parents can help him directly with his school work, irrespective of country of residence. Also, however, the older the child, the more articulate he is and the more attention and power he commands inside as well as outside the family" (Inbar and Adler, 1976:197). The vulnerable age phenomenon was replicated by Inbar (1977) in the context of Canada using data from 1971 Canadian Census. It was found that age at immigration is an important factor in predicting immigrants' educational attainment. Consistent with his previous research, Inbar (1977) found that those who were immigrated below 6 years of age or 12 years or more had higher rates of college attendance which suggested that the relationship was curvilinear. In the Canadian sample the vulnerable age phenomenon is true for males only, which is independent of parental socioeconomic success, and culture of origin.

Jones (1981) examined the relationship between age at immigration and educational attainment among immigrants in Canada using data from Canadian Mobility Study 1973. His findings clearly contradict with previous findings of Inbar and Adler (1976) and Inbar (1977). Essentially what Jones (1981) found was that there was a weak negative relationship between age at immigration and educational attainment and the shape of the relationship was not curvilinear. Those who were 0-5 or 6-10 years of age at immigration had higher educational attainment compared to those who were 11-16 years of age at immigration. The analyses of CMAs data revealed a similar pattern for females as well. A strong negative association between age at immigration and educational attainment was found for females when controls for SES, mother tongue and birth order were introduced. Finally, Jones (1981) had found no support for Inbar's (1977) vulnerable age phenomenon. Jones (1987) has further explored the relationship between age at immigration and educational attainment by including a measure of periodicity in educational attainment models. Essentially what he found was age at immigration exerts a strong negative impact on educational attainment when year of immigration is controlled.

In addition, Cahan et al. (2001) examined the relationship between age at immigration and educational achievement at age 14 in Israel. In general, they found a clear negative relationship between age at immigration and educational achievement. A monotonic decrease in educational attainment was reported as a function of age at immigration starting at 7. The findings of this study did not support the vulnerable age hypothesis, according to which educational attainment is a U-shaped function of age at immigration. But why do older immigrants have lower educational achievement as

compared to young immigrants? Cahen et al (2001) argued that foreign language acquisition played an important role in the relationship between age at immigration and educational attainment. Older immigrants demonstrate lower proficiency in second language acquisition than young immigrants, which works as an impediment for them to achieve higher educational attainment. But the limitation of this study was that educational outcome was measured at age 14, which does not seem reasonable as a measure of educational outcome.

Tubergen et al. (2004) examined differences in labour market participation and unemployment among immigrants of 18 Western societies based on their origin, destination, and community effects by using data from the International File of Immigration Surveys. Their analysis showed that the economic incorporation of immigrants is affected by their country of origin (origin effect), country of destination (destination effect), and the specific relation between origins and destinations (community effects). More specifically, they found that both for male and female immigrants, higher levels of political suppression in their country of origin were associated with lower levels of labour force activity and employment in the country of destination. Moreover, they found that immigrants with higher rate of income inequality in their country of origin had lower levels of participation in labour market and also lower levels of employment rate in the country of destination. Regarding destination effect, Tubergen et al. (2004) did not find any positive impact of host countries, which followed a point system, on labour force participation and employment for immigration such as Canada and Australia. Regarding community effect they found, "immigrants from predominantly Christian countries participated more often in the labour market and

were more often employed than immigrants from non-Christian countries, with the exception of the employment of males. This general pattern confirmed the idea of social distance, which was presumed to be lower toward Christian groups than toward non-Christian groups. Correspondingly, members of a predominantly Christian group experienced less discrimination in the labour market" (Tubergen et al., 2004:719).

In Canada, studies on the labor market participation of immigrants (e.g., Heibert, 1997, 1999; Norcliffe and Liu, 1996; England and Stiell, 1997; Murdie, 1998; Giles and Peterson, 1996; Pratt, 1997) show that a vast majority of immigrants are likely to be employed in non-professional jobs, which helps explain their lower level of income as compared to the native-born. In general such studies are consistent with labor market segmentation theory which sees immigrants as being in the low paying sector of the economy, irrespective of their level of education.

This is complicated by the fact that immigrants entering Canada come from a wide spectrum of class positions. Thus while the income of recent immigrants, on average are lower than those of non-immigrants, this average can conceal huge variations across immigrants themselves (Heibert: 2000).

It has been reported by Ley and Smith (1997) that the extent and depth of poverty among immigrants are increasing in the United States. Their analysis shows that when recent immigrants are taken into account the association between immigration and poverty became strongest. It suggests that recent immigrants have higher prevalence of low income than those of long-term immigrants. Therefore, duration of immigration is an important factor for achieving economic attainment. One important limitation of this study is that although they have focused their attention on the impact of duration of

residence they did not look at the impact of age at immigration on the prevalence of low income among various subgroups.

Boyd and Grieco (1998) examined socioeconomic achievements in terms of education and occupational status of the second generation in Canada by using data from the 1994 Canadian General Social Survey (GSS). Both males and females of 15-64 years of age were included for study. In general, they found that the second generation experienced higher levels of success compared to the first generation and 3rd generation with respect to educational levels and occupational status. More specifically, they found that second generation females have higher years of schooling and occupational status compared to other generation groups. And second generation females with two foreign born parents, have higher educational and occupational status compared to second generation females with one foreign born parent. In addition, "compared to other generation groups, Canadian-born women with two foreign-born parents concentrate in upper-white collar jobs, including medicine and health, natural and social sciences, teaching and artistic occupations" (Boyd and Grieco, 1998:864). Moreover, analysis of the second generation by parental birthplace revealed that significant variation existed in educational and occupational attainments among North American and European generation groups. But they did not look at educational and occupational attainments of second generation with parents born in Asia or Africa. Overall, findings of this study support the "strait line" assimilation model, which assumes that with increasing duration of residence, children of immigrants become more integrated in terms of their behaviours and socioeconomic characteristics with the host society. And, at one stage it becomes

impossible to distinguish second generation and 3rd generation and over from the rest of host society (Gans, 1992).

Boyd (2002) examined the educational attainments of the second generation population age 20-64 in Canada, by using data from the 1996 Panel of the Survey of Labour and Income Dynamics (SLID) in Canada. Overall, it was found that the 1.5 and second generations had higher educational attainments than did the first and third-plus generations. Indeed, "the findings are closer to the *success* or *immigrant optimism model* in which the achievements of the 1.5 and second generation exceed those of their parents and the third-plus generation" (Boyd, 2002:1047). However, in this study she did not find any support for the "second-generation decline" approach that the 1.5 or second generation would have lower levels of educational success than the first or third plus generations. Another important finding of this study was that visible minority immigrant offspring had the highest educational attainments compared to other generation groups. More specifically, the finding shows that "compared to the years of education for third-plus-not-visible-minority generation, educational attainments are significantly greater for the 1.5 and second generation. Relative to the reference group, immigrant offspring who are members of visible minority groups have close to a year or more of schooling, net of age, sex, and parental education" (Boyd, 2002:1053). Boyd (2002) argued that the propensity to remain in school might be part of the explanation for the higher educational attainments of visible minority immigrant offspring over other generation groups.

Palameta (2007) examined the economic integration of immigrants' children in Canada using data from the Survey of Labour and Income Dynamics (SLID). Overall Palameta (2007) found that second generation youths were less spread out geographically

than peers with native-born parents. Moreover, second generation youths were more educated and less likely to drop out of high school compared to third generation. However, some young visible minority men with two immigrant parents were at earning disadvantages compared to their native-born counterparts. Palameta (2007) states,

> "with all other variables accounted for, young visible minority men with two immigrant parents earned roughly 38% less in year 1 than their counterparts with native-born parents. Men with two immigrant parents who were not visible minorities, on the other hand, were no different from those with native-born parents. Among young women with two immigrant parents, magnitudes of earnings coefficients were very similar between visible minorities and those who were not visible minorities—neither were significantly different from those with two native born parents....Explanations of lower earnings among visible minority immigrants usually centre on language deficits and lack of recognition of foreign educational credentials or work experience. These explanations are unlikely to apply to their children, born and educated in Canada." pp. 13-14

Parental expectation for immigrant children is another important determinant for achieving educational success. Higher educated parents have higher educational expectation from their children. Previous research shows that parenting style impacts on the educational attainment of their children. Kao (2004) examined the impact of parental influence on the educational outcome of immigrant youth using data from the National Education Longitudinal Study 1998. It was found that significant variation in parenting style and its impact on educational attainment prevailed by race and ethnicity. Immigrant parents are more likely to talk about college and have better interaction with their

children compared to native born parents. Overall, Kao (2004) found that Asian youth had higher educational attainment than whites, while Hispanic and black youth had lower educational outcome after controlling for the effects of socioeconomic status, generation status, and gender. In addition, first generation and second generation youth had higher educational outcome than their third generation counterparts.

Walters et al. (2007) examined the acculturation of ethnic immigrants (generation 1.0 and 1.5) in Canada using data from the 2002 Ethnic Diversity Survey (EDS). A total of 42,476 respondents aged 15 years or over were interviewed in the 10 provinces. The dependent variable was the ethnic (cultural) identity, which was defined into three categories namely assimilated identity, integrated identity, and neither assimilated nor integrated.[3] The distinguishing characteristic of this study was that they had used socioeconomic characteristics (e.g. education, occupation, and income) as the independent variables instead of using those as out come variables to predict ethnic (cultural) identity of immigrants in Canada. Overall, they found that religion, discrimination, visible minority status, language use, voting behaviour, and duration of residence in Canada were statistically significant in predicting ethnic identity of immigrants in Canada. In addition, they found that employment status, occupation, and income were not statistically significant. The more important finding for this research was the significant impact of language use in determining immigrants' ethnic identity in Canada. The authors found, "those who speak English at home are slightly more likely to report an assimilated ethnic identity than are respondents who do not speak English at

[3] Those who reported their ethnic identity as Canadian were defined as "assimilated", and those who reported their ethnic identity as at least one other ethnic group, in addition to Canadian, were defined as "integrated". Those who reported their ethnic identity as other than Canadian, were defined as neither assimilated nor integrated.

home; the respective probabilities are .19 and .13. Conversely, immigrants who do not speak English at home are more likely not to assimilate or integrate their ethnic identity to that of their host country" (Walters et al., 2007:53). Moreover, regarding visible minority they found, "blacks are least likely to have an assimilated ethnic identity. The predicted probability of a Black immigrant reporting an assimilated, integrated, or neither assimilated nor integrated identity is .08, .16, and .76, respectively. In contrast, Chinese and White immigrants are most likely to adopt the ethnic identity of their host country, either in whole, or in part. South Asian immigrants, while most likely to have an assimilated ethnic identity, are the least likely to have an integrated ethnic identity" (Walters et al., 2007:59). In addition, they found that increasing duration of residence in Canada had a positive impact on immigrants' assimilation with the host society. Immigrants with longer duration of residence in Canada had higher probability of reporting an assimilated or integrated ethnic identity compared to recent immigrants in Canada. "The probability of reporting an assimilated identity increases steadily over time, whereas the probability that immigrants report an integrated ethnic identity or an ethnic identity that is neither assimilated nor integrated declines with time since migration" (Walters et.al., 2007:59). Finally, they reported that age at immigration was negatively associated with the probability of reporting integrated identity.

Li and Dong (2007) examined the earnings of Chinese immigrants in the enclave and mainstream economy using data from the 2001 Census of Canada. In general, they found that Chinese immigrants of the same gender who worked in the enclave economy had lower income attainment than their respective counterparts in the mainstream

economy. They did not find any support for the "immigrant enclave economy thesis" introduced by Wilson and Portes (1980)[4]. Li and Dong (2007) states:

> "One reason that explains why the returns of the enclave are lower than the mainstream economy has to do with the difference in the types of jobs concentrated in the enclave. About 75% of all the jobs held by Chinese men and 71% held by Chinese women in the enclave economy tend to be concentrated in relatively lower-paying industrial sectors, including manufacturing, wholesaling and retailing, accommodation and food services, and other non-professional services. In contrast, 36% of the jobs of Chinese men and 45% of those of Chinese women in the mainstream economy tend to be in the higher-paying sectors of financial services and professional services. Furthermore, those Chinese immigrants in the enclave economy tend to be much more likely not to speak the official languages than those in the mainstream economy. These differences suggest that the very cultural and social features- a common minority language and an ethnic consumer based specialized market- that facilitate the formation of the enclave economy also disadvantages its participants" (p. 93).

Hou and Balakrishnan (1996) analyzed the integration of visible minorities in contemporary Canadian society using data from 1991 Canadian Census Public Use Sample. They tested the hypothesis that European groups such as Italians, Portuguese, Greeks, and Poles would find it easier to integrate than Blacks, Chinese, South Asians, and other visible minorities. Only those 30-60 years of age were selected for this study. Regarding educational attainment, they found that Polish group had the highest

[4] "Immigrant enclave economy thesis" explains "how some of the immigrant groups in North America manage to develop alternate avenues of social mobility by forming a protected economy using immigrant labour, ethnic urban concentration and cultural affinity" (Li and Dong 2007:66-67).

educational attainment, higher than British immigrants. This has been explained by the higher educational levels at all entry ages for Polish immigrants. Among visible minorities, the Chinese, South Asians, and other visible minorities had higher educational attainment than the British and the Canadian born. However, Blacks had lower educational attainment than the British. Regarding occupational status, Hou and Balakrishnan (1996) found that the four selected European groups (Italians, Greeks, Polish, and Portuguese) had higher proportion in managerial and professional occupations than the British and the total population. However, South Asians, Blacks and others (East/South East Asians, Latin/Central/South Americans) had lower proportion in managerial and professional occupations than the British and the total population. Regarding income attainment, Hou and Balakrishnan (1996) state:

> "All the selected ethnic groups have a lower "average unadjusted income" than the British. Compared with the total population, only Italians have a higher average unadjusted income than the British. When adjusted for the effects of all the selected control variables, the income variation across ethnic groups decreases. However, the remaining ethnic differentials are still statistically significant. All the visible minorities have average incomes lower than the grand mean and especially lower than that of the British. On the other hand, among the four selected minority groups of European origin, only the Greeks still have an average income lower than the grand mean, while the other three groups have average incomes close to or higher than the British. Assuming that similar educational and occupational attainment should yield similar incomes, there does not appear to exist systematic income inequality among European groups.

Nevertheless, ethnic differentials in income still exist, and visible minorities are generally at a disadvantage in this regard" (Hou and Balakrishnan 1996:321).

Hou and Balakrishnan (1996) attributed the lower socioeconomic attainment in terms of education, occupation and income of visible minority immigrants to the large proportion of new immigrants, difficulties with official languages, immigration status (i.e., age at immigration), and occupational structures.

Basavarajappa and Jones (1999) examined visible minority income differences in Canada using data from the 1991 Census Public Use Sample Tape (PUST). The human capital variables (age, years of schooling, and knowledge of the official languages), social support variables (size of family, marital status, and religious affiliation), residence variable (the region of residence in Canada) and immigrant status variables (country/region of birth and period of immigration) were used as the variables to predict visible minority income differences. Overall, they found that visible minority male and female immigrants had income disadvantages of 30 and 8 per cent, respectively, over their nonvisible minority counterparts. More specifically they found that "at ages eighteen to twenty-nine years, visible minority males and females, both Canadian-born and immigrant, have lower incomes than their nonvisible minority counterparts. This may be due in part to visible minority persons still acquiring education at these ages while their nonvisible minority counterparts are already in the workforce....At all other ages, while Canadian-born visible minorities have higher incomes than their nonvisible minority counterparts, immigrant visible minorities have lower incomes" (Basavarajappa and Jones 1999:236-237).

Among other studies that have found significant differences in income attainment between immigrant visible minority and their nonvisible minority counterparts include deSilva (1996), Boyd (1992), Miller (1992), and Bloom et al. (1995). Miller (1992) have found decline in earnings among immigrant visible minority for all ethnic groups, in general and Asian groups, in particular. "One of the reasons may be that Asian immigrants, to a greater extent than other groups, put priority in acquiring human capital and other skills rather than working full-time immediately after their arrival. Consequently in later years their incomes rise faster than those of the native born and many other immigrant groups" (Basavarajappa and Jones 1999:237). However, Chiswick et al. (2005) argued that the educational credentials and occupational skills of immigrants who were from lower income origin were not evaluated in their destination of high income, which ultimately paved the way for higher prevalence of low income immigrants.

Chapter 3

3. Theoretical framework

3.1 Socioeconomic attainment of 30-year old immigrant women in Canada

In this study *age at immigration* is the central independent variable, and income, education, and occupation are the three outcome variables (i.e., dependent variables). The causal model (Figure 1) demonstrates how age at immigration determines immigrant women's education, income and occupation at age 30. The intervening variables in the model are parental expectation for educational attainment (high vs. low), and ability to learn English/French. The intervening variables were directly measured in this research.

In this model (Figure 1) two categories of age at immigration have been selected for study. The first category includes those who were less than or equal to 12 years of age during immigration and have been defined as child immigrant. The second category includes those who were between 13 to 19 years of age during immigration and this group has been defined as teen immigrants. Collier (1987) also defined 'young immigrants' as those who immigrated at below 12 years of age and 'older immigrants' as those who immigrated at 12-15 years of age.

In general, the model (Figure 1) illustrates that parents have higher expectations from child immigrants and child immigrants have greater ability to learn a new language. This in turn promotes higher educational success and achievements among the child immigrants which in turn leads to eventually better occupation and income attainment as an adult. This is consistent with Goyder's (2005) analysis of the dynamics of occupational prestige (1975-2000) in Canada. Overall, he found that higher educational

attainment leads to higher occupational prestige and this in turn leads to higher income for immigrants.

More specifically, the model (Figure 1) also assumes that immigrant parents have stronger educational expectations of their child immigrants as compared to teen immigrants. (Teen immigrants may have to work to help support the family and might be expected to leave school early). Thus, parental expectation leads to higher educational attainment for child immigrants which in turn leads to higher occupational prestige and higher levels of income as compared to teen immigrants at age 30.

There are several reasons for greater expectation of child immigrants than teen immigrants. First, immigrant parents experience several barriers (i.e., problems of acculturation, racial discrimination, and lower language proficiency in English/French) to establish themselves in the job market of the host society. On the other hand, child immigrants are advantaged in terms of higher language proficiency, and higher level of acculturation into the host society. Therefore, the general expectation of immigrant parents is that child immigrants will not experience those barriers in obtaining higher degrees, and to establish themselves in the job market. These factors lead to the development of greater expectation towards child immigrants than teen immigrants. Second, the greater expectation towards child immigrants can also be explained by the "immigrant optimism" hypothesis introduced by Kao and Tienda (1995). "Immigrant optimism" hypothesis suggests that immigrant parents hold high expectations for their children, which in turn lead to higher educational achievement compared to native-born population. Overall, Kao and Tienda (1995:9) found that child immigrants had better educational performance and expressed higher educational aspirations than children of

native-born parents. The authors added that the higher educational success of child immigrants held even after the effects of race, ethnicity, and parental socioeconomic status were held constant. They concluded that parental immigrant status, with its attendant behavioral and normative implications, was pivotal in determining the scholastic performance of child immigrants.

The model (Figure 1) further assumes that in Canada child immigrants have greater ability to learn English/French which in turn contributes to higher educational attainment. Higher educational attainment leads to higher occupational prestige and due to this higher educational prestige child immigrant women can have comparatively higher income than that of teen immigrants. But how is age at immigration related with immigrants' ability to learn English/French? Why do child immigrants demonstrate better ability to learn English/French as compared to teen immigrants? Recent studies have addressed the relationship between age at immigration and scholastic achievement.

Collier (1987) examined the influence of age at immigration (5-15), and duration of residence on the rate of acquisition of cognitive academic second language proficiency and content area achievement among 1,548 limited English proficient (LEP) students in U.S.A using cross-sectional data from the years 1977-1986. He found that although each year of duration of residence added higher proficiency in English for all age groups, age at immigration had higher influence in achieving second language proficiency. More specifically, he found that students who had immigrated below 12 years of age demonstrated better performance in English proficiency than those who immigrated at older age (12-15). Those who had immigrated at ages 8-11 took only 2-5 years to reach

grade-level norms in academic achievement compared to 6-8 years for those who had immigrated at ages 12-15, when both groups had the same duration of residence.

Asher and Garcia (1969) experimented with Cuban immigrants to explore the optimal age to learn a foreign language. In general, they found that those who came to the United States under six years of age had the highest probability of acquiring a near native pronunciation of English and those whose age at immigration was above thirteen had the lowest chance of near-native speech. In addition, they also found that duration of residence in United States was also important in determining their proficiency in second language. The findings of this study are consistent with the brain plasticity theory, the biological disposition theory, and an imprinting theory. "All of these theories share a common theme which is that something in the early development of the child maximizes the probability that the younger the human organism when exposed to a language, the greater the probability that the individual will acquire a native pronunciation" (Asher and Garcia, 1969:334).

Redstone (2007) describes the impact of age at immigration and duration of residence on the probability of English use in the United States by using data from New Immigrant Survey. One important finding of the study is that age at arrival is negatively associated with the probability of English use at home, at work, with friends, and with spouse. In addition, it was found that with increasing duration of residence in the United States, the probability of English use starts to increase. And those who came to the United States before 40 years of age had higher probability of English use compared to those came after 40 years of age.

The model (figure 1) also assumes that education has both a direct effect and an indirect effect on income. The indirect impact of education on income is mediated through marital status and occupational prestige. For marital status, the assumption is that those who are higher educated have higher chance of being married and therefore married women are likely to have higher income at age 30. In addition, those who have higher education have lower chance of being divorced. However, as compared to single persons divorced women are assumed to have lower income. Thus the indirect additive impact of education on income, which is mediated through marital status, is positive. For occupational prestige the assumption is that higher education leads to higher occupational prestige, which in turn leads to higher income for immigrant women at age 30.

3.2 Comparison of income attainment by generation status

Another aspect of this study is the comparison of economic attainment by generation status. The model in Figure 2 demonstrates the relative standing of immigrant women of first generation (both child immigrants and teen immigrants) and second generation as compared to women of third generation and over. Generation status is the main independent variable in this second model. Income is the outcome variable. The intervening variables in the model include parental expectation for educational attainment, and ability to learn English/French, education and occupational prestige.

The second model (Figure 2) assumes that parental expectation for educational attainment to child immigrant women is comparatively lower than for women of third generation and over, which explains the lower educational attainment of child immigrant women. Lower educational attainment leads to lower occupational prestige for child immigrant women, which in turn leads to lower income at age 30. Thus, the underlying

assumption is that child immigrant women of first generation would have lower income attainment at age 30 compared to women of 3rd generation and over of the same age group. The impact of generation status on education is also mediated through their ability to learn English/French. The assumption is that child immigrant women have lower ability to learn English/French compared to women of third generation and over, of the same age group. Lower proficiency in English/French leads to lower educational attainment, which in turn leads to lower occupational prestige and lower income for child immigrant women at age 30 compared to women of third generation and over.

Moreover, parental expectation for educational attainment to teen immigrant women is comparatively lower than women of third generation and over. Thus, teen immigrant women will have lower educational attainment compared to women of third generation and over. This, in turn, will lead to lower occupational prestige and lower income for teen immigrant women at age 30 compared to women of third generation and over at age 30. This is also mediated through their ability to learn English/French. It is assumed that teen immigrant women of first generation would have lower ability to learn English/French compared to women of third generation and over. The lower proficiency in English/French leads to lower educational attainment for teen immigrant women, which in turn leads to lower occupational prestige and lower income at age 30. Thus, it is assumed that teen immigrant women would have lower income attainment at age 30 compared to women of third generation and over at age 30. The assumptions are consistent with previous research conducted by Warman and Worswick (2004). In general, they found that immigrants had lower income compared to their native-born counterparts.

The fact that parental expectation to child immigrant women and teen immigrant women is comparatively lower than for women of third generation and over is because both these two categories experience some barriers (i.e., lower proficiency in English/French compared to women of third generation and over, problems of adaptation into the host society, and, in some cases, desire to retain parents' values and norms) to acculturate themselves into the host society. In addition, women of third generation and over are preferred in the job market than child immigrants and teen immigrants. Moreover, for some ethnic groups (i.e. Asian), parental expectation is that women should marry first and, if necessary, they can enter into the job market later. All of the above factors lead to the development of lower parental expectation to child immigrant women and teen immigrant women compared to women of third generation and over.

The model (figure 2) further assumes that parental expectation for educational attainment to second generation women is comparatively higher than that of women of third generation and over. Higher parental expectation leads to higher educational attainment for second generation women, which in turn leads to higher occupational prestige at age 30. And higher occupational prestige leads to higher income. Thus the underlying assumption is that second generation women will have higher economic attainment at age 30 compared to women of third generation and over, of the same age group. This assumption is consistent with previous research conducted by Palameta (2007), and Boyd and Grieco (1998). Overall, they found that second generation had higher socioeconomic attainment compared to first generation and third generation in Canada.

The reason for higher expectation to the second generation women than for women of third generation and over is that the second generation women were born in Canada and they have higher acculturation into the host society than first generation immigrants. Moreover, the Second generation women do not have the problem of language proficiency in English/French. For these reasons, parental expectation is that second generation women will do better socioeconomically than women of third generation and over. Kao (2004) examined parental influences on the educational outcomes of the immigrant youths. The author found that first generation and second generation youth outperform their third generation counterparts. The author concluded that parent-child relationship and parental educational aspirations have led to better performance in educational attainment of second generation youth compared to their third generation counterparts.

Regarding marital status (Figure 2), the assumption is that those who have higher educational attainment have the higher probability of being married, and those who are married have greater probability of higher income attainment at age 30 compared with single. However, those who have higher education have the lower probability of being divorced, and those who are divorced have the lower probability of higher income attainment at age 30 compared with single.

The model in figure 4 demonstrates comparison of income attainment between study groups and the standard group. In regression analyses, 30-year old women of third generation and over in 2001 were used as the reference category to examine the income attainment of the child immigrant women, teen immigrant women, and second generation women.

3.3 Socioeconomic attainment of 30-year old immigrant women of visible minority

The model in Figure 3 demonstrates the socioeconomic attainment of 30-year old immigrant women of visible minority. Visible minority status, and the interaction of the age at immigration and visible minority status have been used as the independent variables in the model. Income is the outcome variable. Parental expectation for educational attainment, ability to learn English/French, educational attainment and occupational prestige are the intervening variables in the model (Figure 3). All these variables were measured in this research.

The model in Figure 3 assumes that visible minority status has both a direct effect and an indirect effect on the income attainment of immigrant women at age 30. The reason for the direct relationship between visible minority status and income attainment of immigrant women is that there is an overwhelming evidence that visible minority immigrants face ethnic and racial discrimination in the host society. Thus visible minority status has a negative impact on the socioeconomic attainment of immigrants in Canada. For example, Gibson (1989) examined the Punjabi Sikh community in the northern California town of "Valleyside". According to the author, white residents were extremely hostile towards the second generation Punjabi Sikh students. The author states:

> "Punjabi teenagers are told they stin. . . told to go back to India. . . physically abused by many students who spit at them, refused to sit by them . . . in class or in buses, throw food at them or worse" (1989:268).

The racial and ethnic discrimination also prevails in state level. Boyd (2008) predicted that visible minority second-generation would have lower levels of educational

and occupational attainment compared with the non-visible minority second-generation or the third-plus generation.

The indirect effect of visible minority status on income is mediated through the parental expectation for educational attainment. The assumption is that parental expectation for educational attainment to immigrant women of visible minority is lower than for immigrant women of not visible minority. Lower parental expectation for educational attainment to immigrant women of visible minority leads to lower educational attainment at age 30 compared to immigrant women of not visible minority. Lower education leads to lower occupational prestige, which in turn leads to lower income for immigrant women of visible minority. Thus, it was hypothesized that immigrant women of visible minority would have lower socioeconomic attainment in terms of education, occupational prestige and income at age 30 compared to immigrant women of not visible minority.

The interaction effect of age at immigration and visible minority status on income attainment is mediated through the parental expectation for educational attainment. It was assumed that parental expectation for educational attainment to child immigrant women of visible minority is higher than that of teen immigrant women of not visible minority. Age at immigration is an important factor here for determining parental expectation for educational attainment to their children. Parents have lower expectation for educational attainment to teen immigrants because they prefer teen immigrants to enter into job market as early as possible so that they can contribute to maintain their household expenditure. On the other hand, parents have higher expectation to child immigrant women for educational attainment. This in turn leads to higher socioeconomic

attainment in terms of education, occupational prestige, and income for child immigrant women of visible minority at age 30 compared to teen immigrant women of not visible minority. This is also mediated through the ability to learn English/French. The model (figure 3) assumes that child immigrant women of visible minority have higher ability to learn English/French compared to teen immigrant women of not visible minority. Higher proficiency in English/French leads to higher educational attainment for immigrant women of visible minority. Higher education leads to higher occupational prestige, which in turn leads to higher income for child immigrant women of visible minority at age 30 compared to teen immigrant women of not visible minority.

3.4 Hypotheses:

The causal arrows in the models in Figure 1, Figure 2, and Figure 3 reflect the hypothesized relationships among variables. Of principal importance are the following hypotheses:

Hypothesis 1: Child immigrant (i.e., age at immigration ≤ 12) women have higher levels of educational attainment at age 30 than teen (i.e., age at immigration >12) immigrant women at age 30.

Hypothesis 2: Child immigrant women have higher levels of occupational prestige at age 30 than teen immigrant women at age 30.

Hypothesis 3: Child immigrant women have higher levels of income at age 30 than teen immigrant women at age 30.

Chapter 4

4. Data and Methodology

4.1 Data

The study was conducted by analyzing data from the 2001 Census of Canada Public Use Microdata Files (PUMFs). The file used contains information on a sample that represents approximately 2.7 percent of the population enumerated in the census. To represent the population as a whole, a weighting factor has been added to this file; it corresponds to the number of units (including the unit selected) represented by each record from the files. The weighting factor, therefore, indicates the number of times a record must be repeated to obtain population estimates. This weighting factor was used in the study to make the analysis representative of the population. The file contains information on immigrants' age at immigration, education, income, occupation, language and ethnicity as well as generational status.

The 2001 Census contains reliable information on immigrants' socioeconomic attainment. It also contains information on generation status and their country of birth. Another important dimension of the data set is that it contains information on visible minority status, which has allowed us to make a comparison between immigrant women of visible minority and immigrant women of not visible minority.

4.2 Methodology

Along with univariate and bivariate analyses, multivariate statistical techniques were applied to analyze the data and to test the research hypotheses. Ordinary Least Square (OLS) Regression was used for continuous dependent variables (i.e., income and education) and ordinal dependent variable (occupational prestige).

In this study, age at immigration is the principal independent variable. The 2001 Census of Canada contains information on age at immigration into six categories: 0-4, 5-12, 13-19, 20-24, 25-29, and 30-39. The first three categories of age at immigration (0-4, 5-12, and 13-19) have been selected for this study. Those who were below or equal to 12 years of age at immigration were considered as "child" immigrants, and above 12 years of age at immigration as "teen" immigrants. This is consistent with previous research conducted by Ellis and Jamie (2006). They have defined the 1.5 generation as immigrants who arrived in the United States under 10 years of age. Since Census 2001 did not contain information for 10 years as the cut off point, 12 years was taken as the cut off point for "child" and "teen" immigrants. However, this cut off point can be justified by the research of Collier (1987) who has also used the "12" as the cut off points for "young" and "old" immigrants.

To fit the age at immigration into regression models, a dummy variable for age at immigration (1=child immigrants, and 0=teen immigrants) was created.

Concerning education, the census contains information on total years of schooling coded as : less than grade 5; 5-8 years; 9 years; 10 years; 11 years; 12 years; 13 years; 14-17 years; and 18 or more years. To make the variable continuous, midpoints were taken for these categories, to reflect years of schooling. (i.e., less than 5 = 2.5; 5-8 = 6.5; 9 = 9; 10 = 10; 11 = 11; 12 = 12; 13 = 13; 14 – 17 = 15.5; and 18 or more = 19.5). This recoded variable of mid points for total years of schooling was used in regression models for educational attainment.

However, a new variable was created to fit education with regression models for occupational prestige and income by taking the deviation of mean from the mid points of

total years of schooling. Moreover, in bivariate analyses, total years of schooling was recoded into three categories: primary education (up to 8 years); secondary education (9 to 12 years); and post secondary education (13 years or more).

Occupation is the second outcome variable in this study. The 2001 Census of Canada combines information on occupation into 14 categories that include senior managers, middle and other managers, professionals, semi-professionals and technicians, supervisors, supervisors: crafts and trades, administrative and senior clerical personnel, skilled sales and service personnel, skilled crafts and trade workers, clerical personnel, intermediate sales and service personnel, semi-skilled manual workers, other sales and service personnel, and other manual workers. To create a scale of occupational prestige, a sample survey was conducted among 10 experts within the Department of Sociology, University of Alberta, with a view to create an ordinal variable for occupational prestige. Each expert was asked to rank these occupations in terms of prestige. The range of ranks was 10 = highest; 1 = lowest. Thus a new variable named 'occupational prestige' was created. Higher values were assigned for higher occupational prestige. The ranking based on occupational prestige from high to low was as follows: (13) professionals, (12) senior managers, (11) middle and other managers, (10) semi professionals and technicians, (9) supervisors, (8) supervisors: crafts and trade, (7) administrative and senior clerical personnel, (6) skilled crafts and trade workers, (5) skilled sales and service personnel, (4) clerical, intermediate sales and service personnel, (3) semi-skilled manual workers, (2) other sales and service personnel, and (1) other manual workers.

For bivariate analyses, occupational prestige was recoded into three categories: high prestige; medium prestige; and low prestige. The high occupational prestige includes

all professionals, and the medium prestige includes all senior managers, supervisors, and supervisors: crafts and trade. The other categories (middle and other managers, semi professionals and technicians, administrative and senior clerical personnel, skilled crafts and trade workers, skilled sales and service personnel, clerical, intermediate sales and service personnel, semi-skilled manual workers, other sales and service personnel, and other manual workers) were included into low occupational prestige.

The income variable (total individual annual income) was transformed to its natural logarithm. First, the income variable was directly used in regression equations but the intercept falls within the negative value (below zero). For this reason, the income variable was transformed into natural logarithm to avoid the negative value for the intercept. In the 2001 Census, total individual income was measured as the total money received from various sources such as wages and salaries; net farm income; Canada child tax benefit; benefit from employment insurance; other income from government sources; dividends, interest on bonds, deposits and saving certificates and other investment income during calendar year 2000 by persons 15 years of age and over. Those individuals reporting negative income were assigned an income of zero dollars so that a log value could be computed.

For the purpose of descriptive analysis, total income was recoded into an ordinal variable consisting of three categories: low income; middle income; and high income. Total income of below $ 30,000 ($0.00 to $29,999) was recoded into the low income category, income from $30,000 to $59,999 was recoded as the middle income, and income of $60,000 or more was recoded into the high income category.

For marital status, the census 2001 file contains information on five categories: (a) divorced, (b) legally married and not separated, (c) separated but still legally married, (d) never legally married-single and (e) widowed. To fit marital status with OLS regression model a series of dummy variables were created as follows: married-dummy (1=married, 0=else); divorce-dummy (1=divorce, 0=else); and single-dummy (1=single, 0=else). Single-dummy was used as the reference category in each regression model.

The two gender categories (1=female and 2=male) were recoded into a dummy variable (1=female, 0=male).

Based on the available data in the 2001 census file place of birth has been recoded into following categories: (1) Born in Canada, (2) Born in USA, (3) born in Europe (United Kingdom, Germany, Italy, Netherlands, Portugal, France, and Greece, Poland, USSR-former European compone, Yugoslavia former, and other Europe), (4) born in Asia (West central Asia and the Middle East, India, other Southern Asia, Eastern and South-East Asia: China, Hong Kong, Philippine, Vietnam, and other East), (5) born in Africa (Eastern Africa, and other Africa), and (6) other foreign born (Central America, South America and Caribbean, Oceania, and other).

Therefore, it raises the question, to what extent socioeconomic attainment of immigrant women differs significantly on the basis of place of birth? Immigrants' socioeconomic attainment, which is mediated through their capability to learn language and incorporating themselves with culture of the host society, also depends on their country of origin. This has been explained as "origin effect" by Tubergen and Maas (2004). Several other studies (Fong and Shibuya, 2005; Alba et al. 2002; White and

Maxim, 2003) in North America have also showed the differentials in socioeconomic attainment among immigrants due to the differences in country of origin.

Regarding Generation, the census file contains information for four categories: (a) 1st generation, (b) 2nd generation: One parent born outside Canada, (c) 2nd generation: both parents born outside Canada; (d) 3rd generation and over. These categories were recoded into three categories: (1) 1st generation; (2) 2nd generation (one parent born outside Canada and two parents born outside Canada); and (3) 3rd+ generation. For this study, the first generation was comprised of two subgroups of "child" and "teen" immigrants as described earlier.

The Census 2001 file contains information on visible minority indicator into five categories: (1) Chinese, (2) South Asian, (3) Black, (4) other visible minority, and (5) not a visible minority. A dummy variable was created for visible minority (1 = visible minority, and 0 = not a visible minority) to fit the variable into OLS regression models. All Chinese, South Asian, Black, and other visible minority were defined as visible minority. To examine the interaction effect of age at immigration and visible minority, a series of dummy variables were created: (1) child immigrant visible minority; (2) child immigrant not visible minority; (3) teen immigrant visible minority; and (4) teen immigrant not visible minority. "Teen immigrant not visible minority" was used as the reference category for the interaction model of regression analysis. The reason for using "teen immigrant not visible minority" as the reference category is that it would allow us to make a comparison of age at immigration and visible minority status simultaneously (i.e., child immigrant versus teen immigrant, and visible minority versus not visible minority).

The Census 2001 file contains information on knowledge of official languages into four categories: (1) English only, (2) French only, (3) both English and French, and (4) neither English nor French. An ordinal variable was created using the proficiency of official languages ranging from 0 to 3 (0 = neither English nor French, 1 = French only, 2 = English only, 3 = both English and French) to fit the variable into OLS regression models. Thus, the higher the score on this variable, the higher the language proficiency.

It was assumed in the models (Figure 1, 2 and 3) that parental expectations for higher educational attainment would lead to higher education attainment for their children. The Census does not contain any information on parental expectations for educational attainment. However, previous research shows that parents with higher education have higher expectation for educational attainment of their children. For example, Portes and Rumbaut (1996) found that parents' educational expectation of their immigrant children does vary on the basis of children's age at immigration. They argued that educational attainment of immigrant children also depends on educational level of immigrant parents. They concluded that highly educated immigrant parents demonstrate higher levels of expectation for educational attainment to their immigrant children.

For this reason, it was decided that parents' education would be used as a proxy variable for parental expectation for educational attainment to their immigrant children. But the Census 2001 PUMF does not contain information on parents' education. For this reason two proxy variables were created: (1) father's education; and (2) mother's education. These two proxy variables were created for each sub group (i.e., immigrant women, second generation women, and women of third generation and over) by considering education as a function of age and place of birth. The cohort of 55-64 was

considered as the parent generation for 30-year old women in 2001. But when both "father's education" and "mother's education" were entered in the regression model, mother's education was statistically insignificant. Also there was multicollinearity between fathers' education and mother's education. For this reason, mother's education was excluded from regression models. Finally, "father's education" was used as the proxy variable for parental expectation for educational attainment to their children.

Therefore, it raises the question whether father's education has stronger effect on their children for educational attainment. Previous research shows that father's education has stronger effect on educational attainment of their offspring. For example, Jones (1987) examined the effect of age at immigration on the educational attainment of immigrants. Essentially, what he found was that fathers' education exerted a greater effect on the educational attainment for immigrant women. In addition, Kao (2004) examined the parental influences on the educational outcomes of immigrant youth and found that father's education had greater effect on the educational outcomes of first generation, second generation and third generation. Kao (2004) concluded that the greater effect of father's education on educational attainment was significant for Asian, Hispanics, Blacks and Whites.

The regression equations used to test the hypotheses were as follows:

(1) $Y_i = a + b_1*AIM + \sum b_j*Xij + e_{ij}$

Where, Yi = education/year of schooling for individual case i; a = the intercept term (the expected average year of schooling when all variables in the model are set to 0); b1 is the slope coefficient denoting the effect of unit change in AIM (age at immigration) on education; $\sum b_j*Xij$ represents all other slope and predictor variables (controls) in the

model (i.e., marital status, fathers' education and language proficiency); eij is an error term (i.e., unexplained variance in education).

(2) $Y_i = a + b_1*AIM + \sum b_j*Xij + e_{ij}$

Where, Yi = occupational prestige for case i; a = the intercept term (the expected average occupational prestige when all variables in the model are set to 0); b1 is the slope coefficient denoting the effect of unit change in AIM (age at immigration) on occupational prestige; $\sum b_j*Xij$ represents all other slope and predictor variables (controls) in the model (i.e., marital status, language proficiency and education); eij is an error term (i.e., unexplained variance in occupation).

(3). $Y_i = a + b_1*AIM + \sum b_j*Xij + e_{ij}$

Where, Yi = personal income for case i; a = the intercept term (the expected average income when all variables in the model are set to 0); b1 is the slope coefficient denoting the effect of unit change in AIM (age at immigration) on income; $\sum b_j*Xij$ represents all other slope and predictor variables (controls) in the model (i.e., marital status, education and occupational prestige); eij is an error term (i.e., unexplained variance in income).

4.3 Sample characteristics

The total population in the 2001 Census file was 29,639,032. Only women of 30-year old in 2001 in Canada were selected for this study (N= 208,994). First generation women of 30-year old comprised of 22.1 per cent (n=46,354) of the total sample followed by 30-year old women of second generation (16.3%). Majority of the 30-year old women in 2001 (61.5%) were the third generation and over (Table 1).

Table 1 shows that majority of the immigrant women age 30 (64.0%) were legally married and not separated, followed by never legally married-Single (28.1%). Moreover, only a small percentage of the immigrant women age 30 (3.7%) were divorced. Regarding age at immigration, it was found that 23.5 per cent of all first generation women 30 years of age the selected respondents were child immigrant women (immigrated below 13 years of age), and 15.9 per cent of the respondents were teen immigrant women (13-19 years of age at immigration).

Regarding knowledge of official language, it was found that most of the immigrant women (78.4%) were proficient only in English, followed by proficient both in English and French (14.1%). However, only a small percentage of the immigrant women (3.3%) were neither proficient in English nor French (Table 1).

Among the selected immigrant women, 67.2 per cent were visible minority and the remaining 32.8 per cent were not visible minority (Table 1).

Concerning education, 74.1% had post secondary education, this was followed by secondary education (22.1%) and primary education (3.8%). Notwithstanding the fact that so many of the respondents had post secondary education the majority of the respondents (77.3%) were employed in low prestige jobs. Only 19.5% of the respondents had high prestige jobs. Regarding income 72.3% were in low income group and 24.0% and 3.7%, respectively, fell in the middle or high income categories (Table 1).

Chapter 5

5. Findings of the study

5.1 Bivariate Analyses

5.1.1 Association between age at immigration and level of education

Child immigrant women had higher educational attainment at age 30 than teen immigrant women. For example, Table 2 shows that 76.1 per cent of child immigrant women had post secondary education at age 30 compared to 67.4 per cent of teen immigrant women at age 30. Moreover, only 1.9% of the child immigrant women had only primary education at age 30 compared to 5.4% of the teen immigrant women. And Table 2 shows that the differences in educational attainment between child immigrant women and teen immigrant women were statistically significant (*Chi-Square=243.98 , df=2, p<0.001).*

5.1.2 Association between age at immigration and occupational prestige

Child immigrant women had higher occupational prestige at age 30 compared to teen immigrant women. More specifically, 23.6% of the child immigrant women had high occupational prestige at age 30 compared to 18.1% of the teen immigrant women at age 30 (Table 3). Moreover, majority of the teen immigrant women (79.2%) had lower occupational prestige at age 30 compared to child immigrant women (72.7%). Analysis of chi-square shows that the differences in occupational prestige were statistically significant at 0.001 levels. These findings support the hypothesis that the child immigrant women have higher occupational prestige at age 30 than teen immigrant women at age 30.

5.1.3 Association between age at immigration and level of income

Although there was no major difference in high income attainment between child immigrant women and teen immigrant women, child immigrant women had the higher percentage (43.4%) of middle income at age 30 compared to teen immigrant women (34.2%) at age 30 (Table 4). Moreover, the percentage of low income for child immigrant women (51.1%) at age 30 was lower compared to teen immigrant women at age 30 (60.3%).The differences were statistically significant (*Chi-Square=148.99, df=2, p<0.001)*. Therefore, child immigrant women had higher income at age 30 compared to teen immigrant women of the same age group.

Therefore, age at immigration matters for socioeconomic attainment of immigrant women. Child immigrant women are likely to have higher educational attainment, higher occupational prestige and higher income at age 30 compared to teen immigrant women.

5.1.4 Comparison of income attainment by generation status

The comparison of income attainment by generation status shows that 1st generation women had lower income at age 30 compared to women of third generation and over. For example, majority of the 1st generation women (72.3%) had low income at age 30 compared to women of third generation and over (66.9%) of the same age group (Table 5). Moreover, only 24.0 per cent of the 1st generation women had middle income compared to 30.0 per cent women of the third generation and over. This is consistent with previous research conducted by Warman and Worswick (2004). Overall, they have found that immigrants had lower level of economic integration compared to their Canadian-born counterparts.

However, the comparison of income attainment between second generation women and women of third generation and over shows that second generation women had higher income at age 30 compared to women of third generation and over of the same age group. For example, 7.0 per cent of the second generation women had high income at age 30 compared to 3.1 per cent women of the third generation and over (Table 5). Moreover, the second generation women had lower percentage (55.9%) in low income at age 30 compared to the women of third generation and over (66.9%). And the differences in income by generation status were statistically significant (*Chi-square=3029.37, df=4, p<0.001).* Some of the previous researches in Canada have reported similar success for the second generation compared to the third generation (i.e., Boyd and Grieco 1998, Boyd and Norris, 1995).

5.1.5 Age at immigration and level of education for visible minority women

Child immigrant women of visible minority had higher educational attainment at age 30 compared to teen immigrant women of visible minority. Table 6 shows that majority of the child immigrant women of visible minority (80.0%) had post secondary education at age 30 compared to teen immigrant women of visible minority (65.9%). In addition, only a small percentage (0.8%) of child immigrant women of visible minority had primary education at age 30 compared to teen immigrant women of visible minority (5.9%) of the same group. The differences in educational attainment between child immigrant women of visible minority and teen immigrant women of visible minority are statistically significant *(Chi-square=340.758, df=2, p<0.001).*

5.1.6 Age at immigration and occupational prestige for visible minority women

Child immigrant women of visible minority had higher occupational prestige at age 30 compared to teen immigrant women of visible minority. For example, 21.9 per cent of child immigrant women of visible minority had high occupational prestige at age 30 compared to 19.6 per cent of teen immigrant women of visible minority (Table 7). In addition, child immigrant women of visible minority had lower percentage of low occupational prestige (75.6%) at age 30 compared to teen immigrant women of visible minority (77.6%). And the differences in occupational prestige between child immigrant women of visible minority and teen immigrant women of visible minority are statistically significant *(Chi-square=6.573, df=2, p<0.05).*

5.1.7 Age at immigration and income attainment of visible minority women

Child immigrant women of visible minority had higher income at age 30 compared to teen immigrant women of visible minority. Table 8 shows that 9.2 per cent of child immigrant women of visible minority had high income at age 30 compared to only 4.4 per cent of teen immigrant women of visible minority. In addition, child immigrant women of visible minority had lower percentage in low income (51.5%) at age 30 compared to teen immigrant women of visible minority (63.0%). And the differences in income attainment between child immigrant women of visible minority and teen immigrant women of visible minority are statistically significant *(Chi-square=167.961, df=2, p<0.001).*

Therefore, age at immigration also matters for socioeconomic attainment of immigrant women of visible minority. Child immigrant women of visible minority were

advantaged in terms of educational attainment, occupational prestige and income attainment compared with teen immigrant women of visible minority.

5.1.8 Educational attainment by visible minority status

Immigrant women of visible minority had lower educational attainment at age 30 compared to immigrant women of not visible minority. For example, Table 9 shows that 71.4 per cent of immigrant women of visible minority had post secondary education compared to 79.5 per cent of immigrant women of not visible minority. Moreover, the percentage of primary education is higher among immigrant women of visible minority (4.5%) compared to immigrant women of not visible minority (2.5%). And the differences in educational attainment between immigrant women of visible minority and immigrant women of not visible minority are statistically significant *(Chi-square=3.780, df=2, p<0.001).*

5.1.9 Occupational prestige by visible minority status

Immigrant women of visible minority had lower occupational prestige at age 30 compared to immigrant women of not visible minority. Table 10 shows that 80.9 per cent of immigrant women of visible minority had low occupational prestige at age 30 compared to 70.6 per cent of immigrant women of not visible minority of the same age group. In addition, the percentage of high occupational prestige among immigrant women of visible minority is lower (15.8%) than immigrant women of not visible minority (26.5%). The differences in occupational prestige between immigrant women of visible minority and immigrant women of not visible minority are statistically significant *(Chi-square=6.000, df=2, p<0.001).*

5.1.10 Income attainment of immigrant women by visible minority status

Immigrant women of visible minority had lower income attainment at age 30 compared to immigrant women of not visible minority. For example, Table 11 shows that the percentage of low income among immigrant women of visible minority (75.7%) is higher compared to immigrant women of not visible minority (65.5%). Moreover, only 21.0 per cent of immigrant women of visible minority had medium income at age 30 compared to 30.1 per cent of the immigrant women of not visible minority. In addition, immigrant women of visible minority also had lower percentage (3.3%) of high income at age 30 compared to immigrant women of not visible minority (4.4%) of the same age group. And the differences in income attainment between immigrant women of visible minority and immigrant women of not visible minority are statistically *(Chi-square=5.331, df=2, p<0.001).*

Thus, it is evident that visible minority status is an important determinant for socioeconomic attainment of immigrant women. Immigrant women of visible minority had lower educational attainment, lower occupational prestige, and lower income attainment compared with immigrant women of not visible minority.

5.2. Multivariate Analyses

5.2.1 Educational attainment of 30-year old immigrant women in 2001

Age at immigration was used as the independent variable (Table 12) to predict the educational attainment of 30-year old immigrant women in Canada in 2001 (model 1). The control variables of marital status, fathers' education, and language proficiency were included one at a time in model 2, model 3, and model 4, respectively (Table 12). The inclusion of control variables with the independent variable of age at immigration

increased the explained variation to 8.0 per cent in model 4 and the change in R^2 in each model is statistically significant ($p<0.01$). Gradual inclusion of additional control variables with the independent variable (age at immigration) in each model reduced the value of the coefficient for age at immigration but it was still significant in the full model (model 4), which shows that age at immigration matters in predicting educational attainment of immigrant women at age 30. More specifically, child immigrant women are likely to have higher educational attainment at age 30 compared to teen immigrant women after controlling for marital status, fathers' education, and language proficiency (model 4). Moreover, Table 12 also shows that fathers' education has a significant positive impact on the educational attainment of immigrant women. In addition, higher language proficiency is also associated with higher educational attainment for immigrant women at age 30 (Table 12).

Thus, the effect of age at immigration on educational attainment of immigrant women is mediated through parental expectation and language proficiency. The reason for higher educational attainment for child immigrant women is that higher parental expectation to child immigrant women has led to higher educational attainment at age 30 compared with teen immigrant women. In addition, the higher ability to learn English/French has also contributed to achieve higher educational attainment for child immigrant women compared with teen immigrant women.

5.2.2 Occupational prestige of 30-years old immigrant women in 2001

The effect of age at immigration on occupational prestige for 30-year old immigrant women was examined in Table 13. Additional control variables of marital status, language proficiency, and education were added in subsequent models. Inclusion

of additional control variables with the independent variable of age at immigration has increased the explained variance to 26.1 per cent in model 4. The change in R^2 in each model was statistically significant ($p<0.01$). Although gradual inclusion of the control variables has reduced the value of the coefficient for age at immigration, it was still significant in the full model (model 4, $p<0.01$), which denotes that child immigrant women are likely to have higher occupational prestige at age 30 compared to teen immigrant women. Table 13 also shows that language proficiency has a significant positive impact on the occupational prestige of immigrant women at age 30. In addition, higher education is associated with higher occupational prestige for immigrant women at age 30.

Therefore, age at immigration is inversely related with occupational prestige for immigrant women. This can be explained by the fact that the effect of age at immigration on occupational prestige is mediated through language proficiency and educational attainment. More specifically, child immigrant women have higher proficiency in English/French, and have higher educational attainment, and higher educational attainment leads to higher occupational prestige for child immigrant women compared with teen immigrant women.

5.2.3 Income of 30-years old immigrant women in 2001

Income attainment is considered to be one of the important indicators of socioeconomic attainment. The effect of age at immigration on the income attainment of 30-year old immigrant women was examined in Table 14 (model 1). Later, in model 2 and model 3, control variables of marital status and education were included, respectively. The gradual inclusion of control variables has increased the explained variation to 3.0 per cent in model 3. Model 3 shows that child immigrant women are

likely to have higher income at age 30 compared to teen immigrant women after controlling for marital status and education. However, when occupational prestige was included in model 4, the coefficient for age at immigration became insignificant (Table 14). The reason might be that the impact of age at immigration on income is mediated through occupational prestige. The change in R^2 in each model is statistically significant ($p<0.01$). And model 4 explains 7.0 per cent of the variation.

In addition, table 14 shows that higher education is associated with higher income attainment for immigrant women at age 30. Moreover, higher occupational prestige also leads to higher income for immigrant women at age 30 (Table 14).

The effect of age at immigration on the income attainment of immigrant women can be explained by the fact that age at immigration does not have any direct effect on income rather the effect of age at immigration on income is mediated through educational attainment and occupational prestige. More specifically, child immigrant women have higher educational attainment, which in turn leads to higher income attainment for child immigrant women compared with teen immigrant women. Another indirect effect of age at immigration on income attainment is that child immigrant women have higher educational attainment, which in turn leads to higher occupational prestige, and higher occupational prestige eventually leads to higher income for child immigrant women compared with teen immigrant women.

Therefore, age at immigration is inversely related with socioeconomic attainment for immigrant women. More specifically, child immigrant women have higher educational attainment, higher occupational prestige and higher income attainment compared with teen immigrant women. Similar findings were also reported in the earlier

study of Trovato and Grindstaff (1986). They found that immigrant women who came to Canada as children (at age ten or under) had higher educational attainment, higher success in professional occupations, and higher income compared to adult immigrant women (ten to twenty years of age at immigration). Moreover, Halli and Vedanand (2007) found similar success in educational attainment and occupational status for the 1.75 generation compared with the 1.5 and 1.25 generations. They added that the 1.25 generation appeared to be the most vulnerable compared with other two groups.[5]

5.3. Comparison of income attainment by generation status

5.3.1 Comparison of income attainment of child immigrant women and teen immigrant women with that of women of the third generation and over

Income attainment is one of the important indicators of socioeconomic assimilation into the host society. In this research, the income attainment of child immigrant women and teen immigrant women was compared with their third generation and over counterparts. This comparison enables us to examine to what extent child immigrant women and teen immigrant women are assimilating into the host society compared with women of the third generation and over. In addition, the comparison of income attainment of child immigrant women and teen immigrant women to that of women of the third generation and over will show whether the "straight-line" assimilation theory is applicable in the context of Canada.

Table 15 shows that child immigrant women who are married and who are divorced are likely to have higher income at 30 compared to child immigrant women who are single after controlling for education and occupational prestige. However, teen

[5] Halli and Vedanand (2007) defined 0-5 years of age at immigration as the 1.75 generation, 6-12 years of age at immigration as the 1.5 generation and 13-17 years of age at immigration as the 1.25 generation.

immigrant women who are married have lower income attainment at age 30 compared to their single counterparts (Table 16). In addition, married women of the third generation and over also have lower income attainment at age 30 compared to their single counterparts (Table 17). One reason for the lower income attainment of married women might be that having children affects the income attainment of married women compared to their single counterparts.

However, child immigrant women and teen immigrant women who are divorced are likely to have higher income at age 30 compared to their respective single counterparts after controlling for education and occupational prestige (Table 15 and Table 16). Moreover, women of the third generation and over who are divorced are likely to have higher income attainment at age 30 compared to their single counterparts (Table 17).

Comparison of income attainment shows that both child immigrant women and teen immigrant women who are married have higher income attainment at age 30 than their third generation and over counterparts (Table 18 and Table 19)[6]. Moreover, both child immigrant women and teen immigrant women who are divorced have higher income attainment at age 30 compared to their third generation and over counterparts (Table 18 and Table 19). The reason for higher income attainment of both child immigrant women and teen immigrant women compared to women of the third generation and over is that parents have higher expectation to both child immigrant women and teen immigrant women, which in turn leads to higher educational attainment.

---

[6] The following formula was used to determine whether differences between slopes were statistically significant: $t = (b_1 - b_2) / \sqrt{(SE_1^2 + SE_2^2)}$, where b_1 is a regression slope for the respective variable of the first model, and b_2 is a regression slope of the respective variable for the reference model, and SE_1 is a standard error of the slope b_1 and SE_2 is a standard error of the slope b_2. The interaction effect was considered to be statistically significant if the obtained t-value was greater than 1.96 ($p<0.05$).

Higher educational attainment leads to higher occupational prestige, which eventually leads to higher income attainment for both child immigrant women and teen immigrant women at age 30 compared to women of the third generation and over.

5.3.2 Comparison of income attainment between second generation women and women of third generation and over

In this research, the income attainment of the second generation women was examined in relation to women of the third generation and over. Second generation is considered as a bridge between the first generation immigrants and the third generation and over. Therefore, it is important to examine to what extent second generation women are able to overcome the barriers experienced by their immigrant parents and to what extent they are able to assimilate into the host society. Moreover, comparison of income attainment of second generation women to that of their third generation and over counterparts would enable us to evaluate the idea of the "second generation decline" in the context of Canada.

Table 20 shows that second generation women who are married are likely to have lower income attainment at age 30 compared to second generation women who are single after controlling for education and occupational prestige. However, second generation women who are divorced are likely to have higher income at age 30 compared to their single counterparts after controlling for education and occupational prestige.

Comparison of income attainment in Table 21 shows that the second generation women who are divorced have higher income attainment at age 30 than women of the third generation and over who are divorced. However, there is no significance difference

in income attainment between second generation women who are married and women of the third generation and over who are married (Table 21).

The higher income attainment of the second generation women compared to women of the third generation and over can be explained by higher parental expectation to the second generation women than for women of the third generation and over, which in turn leads to higher educational attainment for the second generation women. Higher education leads to higher occupational prestige, and higher occupational prestige eventually leads to higher income for second generation women.

Similar findings of the second generation success were also reported by Palameta (2007) who found that second generation women had higher income compared to their third generation counterparts. He argued, "a large part of the annual earnings advantage arises because women with two immigrant parents are less likely to have children than their third-generation and higher counterparts" (Palameta 2007: 11).

5.3.3 Comparison of income attainment by country/region of origin

In this research, the income attainment of immigrant women of different origin was compared to that of women of the third generation and over. The reason for looking at immigrants' country/region of birth is that the income attainment across different immigrant groups would not be same. It would enable us to examine the impact of immigrants' "origin effect" on their income attainment irrespective of their education and occupational prestige.

The comparison of income attainment by country/region of origin shows that immigrant women who were born in the United States, and in Europe are likely to have higher income attainment at age 30 compared to women of the third generation and over.

More specifically, married immigrant women who were born in the United States and in Europe have higher income attainment compared to married women of the third generation and over (Table 23-24). Moreover, divorced immigrant women who were born in the United States, and in Europe have higher income attainment compared to divorced women of the third generation and over (Table 23-24).

On the other hand, immigrant women who were born in Asia, Africa, and other regions (Central America, South America and Caribbean, Oceania and other) have lower income attainment at age 30 compared to women of the third generation and over. More specifically, married immigrant women who were born in Asia, and other regions have lower income attainment than married women of the third generation and over (Table 25-27). Moreover, divorced immigrant women who were born in Asia, Africa, and other regions have lower income attainment than divorced women of the third generation and over (Table 25-27).

Therefore, the above comparison of income attainment shows that immigrant women who were born in the United States and Europe have higher income attainment than women of the third generation and over. This can be explained by the advantages of similar culture in the origin and the destination. Those immigrants who were born in the English speaking countries would have better performance in income attainment in Canada. Their educational credentials and occupational skills in abroad are also highly recognized by the host society. On the other hand, the reason for lower income attainment of immigrant women who were born in Asia, Africa and other regions is that they have different language and different culture compared to the host society. Their educational credentials and occupational skills in abroad are not recognized by the host

society, which eventually leads to lower income attainment compared to the third generation and over. For example, Reinhart (2008) cited a joke in *The Globe and Mail* (March 22) frequently used in Toronto: "We have the best educated taxi drivers in the world. We have doctors from Pakistan, lawyers from India, teachers from Philippines and engineers from Bangladesh." In addition, Chiswick et al. (2005) argued, "In the more typical case for economic migrants from a lower income origin to a higher income destination, the immigrant has some skills that are not perfectly transferable, and the types of skills required within an occupation may vary with the level of technology and economic development of the country. As a result, there will be a decline in occupational status from the last job in the origin to the first job in the destination, with a subsequent improvement" (2005:336).

5.4. Socioeconomic attainment of immigrant women by visible minority status

The effect of age at immigration on educational attainment, occupational prestige and income attainment for immigrant women of visible minority was examined in this research. The increasing number of immigrants of visible minority has become a concern in the Canadian society. Therefore, it is important look at the effect of age at immigration on the socioeconomic attainment of immigrant women of visible minority.

5.4.1 Educational attainment of immigrant women of visible minority at age 30

Age at immigration was used as the independent variable to predict the educational attainment of immigrant women of visible minority at age 30 (Table 28). Later, control variables of marital status, fathers' education and language proficiency were included in model 2, model 3 and model 4, respectively. Gradual inclusion of control variables in each model has increased the explained variation to 12.4 per cent in

model 4. And the change in R^2 in each model is statistically significant (Table 28). Table 28 shows that child immigrant women of visible minority are likely to have higher educational attainment at age 30 compared to teen immigrant women of visible minority after controlling for marital status, fathers' education and language proficiency.

5.4.2 Occupational prestige of immigrant women of visible minority at age 30

Age at immigration was used as the independent variable to predict occupational prestige of immigrant women of visible minority at age 30 (Table 29). Later, control variables of marital status and language proficiency and education were added in the subsequent models. Inclusion of these control variables has increased the explained variation to 23.9 per cent in model 4. And the change in R^2 in each model was statistically significant. Table 29 shows that child immigrant women of visible minority are likely to have higher occupational prestige at age 30 compared to teen immigrant women of visible minority.

5.4.3 Income attainment of 30-year-old visible minority immigrant women at age 30

Age at immigration was used as the dependent variable to predict the income attainment of 30-year old immigrant women of visible minority (Table 30). Control variables of marital status, education and occupational prestige were gradually included in model 2, model 3 and model 4, respectively. Gradual inclusion of control variables in each model has increased the explained variation to 3.4 per cent in model 4. And the change in R^2 in each model was statistically significant (Table 30). Table 30 shows that child immigrant women of visible minority are likely to have higher income at age 30 compared to teen immigrant women of visible minority after controlling for marital status, education and occupational prestige.

Therefore, age at immigration is an important determinant of socioeconomic attainment for immigrant women of visible minority. Child immigrant women of visible minority have higher educational attainment, higher occupational prestige and higher income compared to teen immigrant women of visible minority. This can be explained by the fact that higher parental expectation to child immigrant women of visible minority leads to higher educational attainment. Higher educational attainment leads to higher occupational prestige, and higher occupational prestige eventually leads to higher income attainment for child immigrant women of visible minority compared with teen immigrant women of visible minority.

Moreover, the effect of age at immigration on the socioeconomic attainment of immigrant women of visible minority is also mediated through their ability to learn English/French. Child immigrant women have higher ability to learn English/French, which in turn leads to higher educational attainment. Higher educational attainment leads to higher occupational prestige, and higher occupational prestige leads to higher income attainment at age 30 for child immigrant women of visible minority compared to teen immigrant women of visible minority.

5.5. Socioeconomic attainment: Interaction between age at immigration and visible minority status

5.5.1. Socioeconomic attainment: visible minority versus not visible minority

Table 31 (model 2) shows that immigrant women of visible minority are likely to have lower educational attainment at age 30 compared to immigrant women of not visible minority after controlling for marital status, father's education, and language proficiency and the interaction effect (between age at immigration and visible minority status). The model explains 7.6 per cent of variation.

Table 32 (model 2) shows that immigrant women of visible minority are likely to have lower occupational prestige at age 30 compared to immigrant women of not visible minority after controlling for marital status, language proficiency, education and the interaction effect (between age at immigration and visible minority status). The model explains 23.8 per cent of variation.

Table 33 (model 2) shows that immigrant women of visible minority are likely to have lower income attainment at age 30 compared to immigrant women of not visible minority after controlling for marital status, occupational prestige, and the interaction effect (between age at immigration and visible minority status). The model explains 5.4 per cent of variation.

Therefore, immigrant women of visible minority have lower educational attainment, lower occupational prestige, and lower income compared to their not visible minority counterparts. There are two reasons for lower socioeconomic attainment of immigrant women of visible minority: (1) parents have lower expectation for educational attainment to visible minority immigrant women than for not visible minority immigrant women. Lower parental expectation leads to lower educational attainment for immigrant women of visible minority, which leads to lower occupational prestige, and lower occupational prestige eventually leads to lower income attainment for immigrant women of visible minority compared to immigrant women of not visible minority; and (2) the regression models (Table 31-33) show that the lower socioeconomic attainment of visible minority sustained even after controlling for marital status, language proficiency, father's education and interaction effect (between age at immigration and visible minority status).

Therefore, there is a direct effect of visible minority status on their socioeconomic attainment, which suggests the presence of discrimination against visible minority.

Portes et al. (2005) argued that despite higher educational attainment, immigrants of visible minority had lower income compared to not visible minority. This lower income was attributed to "the persistent influence of low parental human capital (among Haitians), and of a negative mode of incorporation due to racial discrimination (among both Haitians and West Indians). Both factors lead to low incomes among immigrant parents and to major difficulties in finding well paid employment among their offspring" (Portes et al. 2005:1026).

5.5.2 Socioeconomic attainment: Interaction effect

Table 31 (model 1) shows that child immigrant women of visible minority are likely to have higher educational attainment at age 30 compared to teen immigrant women of not visible minority after controlling for marital status, father's education and language proficiency. The model explains 6.6 per cent of variation. Inclusion of another control variable of visible minority in model 2 (Table 31) has increased the explained variation to 7.6 per cent but the higher educational attainment of child immigrant women of visible minority still sustained.

Table 32 (model 1) shows that child immigrant women of visible minority are likely to have higher occupational prestige at age 30 compared to teen immigrant women of not visible minority after controlling for marital status, language proficiency and education. The model explains 21.8 per cent of variation. Another control variable of visible minority was added in the subsequent model. Thus model 2 (Table 32) explains

23.8 per cent of variation and the higher occupational prestige of child immigrant women of visible minority still sustained.

Table 33 (model 1) shows that child immigrant women of visible minority are likely to have higher income attainment at age 30 compared to teen immigrant women of visible minority after controlling for marital status and occupational prestige. Model 1 explained 5.2 per cent of variation. Another control variable of education was included in model 1 but due to the collinearity problem with occupational prestige education was excluded from model 1 and model 2. Inclusion of visible minority in model 2 has increased the explained variation to some extent (5.4 per cent) and the higher income attainment of child immigrant women of visible minority still sustained.

Therefore, child immigrant women of visible minority have higher educational attainment, higher occupational prestige and higher income attainment compared to teen immigrant women of not visible minority. This is quite interesting. In general visible minority immigrants have lower socioeconomic attainment but the interaction effect shows that despite being visible minority child immigrant women have higher socioeconomic attainment compared to teen immigrant women of not visible minority. It suggests that age at immigration is a strong determinant for socioeconomic attainment of immigrant women. This is because child immigrants are advantaged in terms of parental expectation, and language proficiency than that of their teen counterparts.

Chapter 6

6. Discussion

6.1 The impact of age at immigration on the socioeconomic attainment of immigrant women

The findings of this study indicate that age at immigration is an important determinant for socioeconomic attainment of immigrant women at age 30. The major finding of this study was that child immigrant women had higher educational attainment and higher occupational prestige at age 30 compared to teen immigrant women of the same age group. The theory developed explains that parents have higher expectation for educational attainment to their child immigrant women than for teen immigrant women. Higher parental expectation leads to higher educational attainment for child immigrant women and higher educational attainment eventually leads to higher occupational prestige compared to teen immigrant women. Moreover, child immigrant women have higher ability to learn English and French, which in turn leads to higher educational attainment compared to teen immigrant women. And higher educational attainment leads to higher occupational prestige for child immigrant women compared to teen immigrant women. This is consistent with previous research conducted by Halli and Vedanand (2007), Trovato and Grindstaff (1986), Jones (1981, 1987) who found that age at immigration had a strong negative impact on educational attainment and occupational status. In general, they argued that foreign language acquisition factor played an important role in educational attainment and occupational success. Older immigrants demonstrate lower proficiency in second language acquisition than young immigrants.

Regarding income, it was found that age at immigration had no direct effect on income attainment of immigrant women at age 30. However, the effect of age at immigration on income attainment is mediated through education and occupational prestige. It suggests that occupational prestige is a strong determinant of income attainment for immigrant women.

6.2 Income attainment: First generation versus third generation and over

Contrary to expectation, it was found that both child immigrant women and teen immigrant women had higher income attainment at age 30 compared to women of third generation and over. More specifically, both child immigrant women and teen immigrant women who are married had higher income attainment at age 30 compared to women of third generation and over who are married of the same age group. Moreover, both child immigrant women and teen immigrant women who are divorced had higher income attainment at age 30 compared to women of third generation and over who are divorced of the same age group (Table 22).

The reason for higher income attainment of child immigrant women and teen immigrant women compared to women of the third generation and over is that parents have higher expectation to child immigrant women and teen immigrant women than for women of third generation and over. Higher parental expectation leads to higher educational attainment, and higher educational attainment leads to higher occupational prestige for child immigrant women and teen immigrant women. Higher occupational prestige eventually leads to higher income attainment for child immigrant women and teen immigrant women at age 30 compared to women of the third generation and over.

Moreover, Kao and Tienda (1995) introduced the "immigrant optimism" hypothesis, which suggests that immigrant parents hold high expectations for their children, which in turn leads to higher educational achievement compared to native-born population. Similar findings were also reported by Feliciano and Rumbaut (2005) who examined the educational and occupational expectations and outcomes among adult children of immigrants in the United States using data from the Children of Immigrants Longitudinal Study (1992, 1995, 2002-2003). They found support for the "immigrant optimism" hypothesis. Young men and women with two parents who are immigrants had higher educational attainment than men and women with only one parent born abroad. Women with two parents born in abroad were more advantaged in educational outcomes than women with only one immigrant parent. Feliciano and Rumbaut (2005) argued, "One possible explanation for this pattern may be that immigrant parents maintain stricter controls over their daughters than do native-born parents, in keeping with the more traditional gender roles in most of their origin countries; it is also likely that families with two immigrant parents may communicates higher aspirations to their children" (2005:1100). In addition, they have also found that females had higher educational and occupational expectations and outcomes than to than males. Thus, higher educational and occupational outcomes lead to higher income attainment for children of immigrants compared to native-born population.

6.3 Income attainment: Second generation versus third generation and over

Another important finding of this research is that the second generation women have higher income attainment at age 30 compared to women of the third generation and over. More specifically, second generation women who are divorced have higher income

attainment than women of the third generation and over who are divorced. However, there is no significant difference in income attainment between second generation women who are married and women of the third generation and over who are married (Table 22).

The theory developed explains that parents have higher expectation to the second generation women than for women of the third generation and over. Higher parental expectation leads to higher educational attainment for second generation women, which in turn leads to higher occupational prestige. And higher occupational prestige leads to leads to higher income attainment for second generation women compared to women of the third generation and over.

The reason for higher parental expectation to second generation women is that the second generation women were born in Canada, would have obtained their education from the host society which is highly recognized, and have higher proficiency in English/French. In addition, second generation women have higher acculturation into the host society compared to their immigrant parents. Therefore, the expectation is that second generation women would have greater success compared to women of the third generation and over.

Similar success for second generation was also reported for Canada by Boyd and Grieco (1998), who found that second generation have higher educational attainment and occupational success compared with first or third plus generation. They argued that parental resources (i.e., socioeconomic background) played an important role for greater success of second generation.

6.4 Comparison of income attainment by country/region of birth

Comparison of income attainment by region of birth shows that immigrant women who were born in the United States and in Europe had higher income attainment at age 30 compared to women of third generation and over of the same age group. The

reason for higher income attainment of immigrant women who were born in the United States and Europe is that their educational credentials and occupational skills are highly recognized by the host society. In addition, they came from English speaking countries, which is considered as another advantage over other immigrants who came from non speaking countries.

However, immigrant women who were born in Asia, Africa and other countries had lower income attainment at age 30 compared to women of third generation and over of the same age group. The reason for lower income attainment of immigrant women who were born in Asia, Africa, and other regions is that their educational credential and occupational skills obtained abroad are not recognized by the host society. In addition, those immigrant women have lower proficiency in English/French, which obstructs their access to higher occupational prestige and income attainment.

Similar findings were reported by Piche et al. (1999), who found that region of origin had significant gross influence on immigrants' income attainment. They added that immigrants from industrialized nations had stronger capacity in obtaining jobs with higher income and socio-economic status. They argued that immigrants who came from less economically developed societies became victim of discrimination in the job market. They further added that those immigrants who came from less economically developed societies faced difficulties in translating human capital experiences, which works as an impediment for their upward mobility.

Moreover, Bloom et al. (1995) found that assimilation had been particularly slow for immigrants who were born in Asia, Africa and Latin America compared to those immigrants who were born in the United States and Europe. They argued that increased

discrimination against visible minority groups had led to the deterioration of their income attainment.

6.5 Socioeconomic attainment: visible minority versus not visible minority

Regression analysis regarding the impact of visible minority status on socioeconomic attainment of immigrant women showed that immigrant women of visible minority had lower socioeconomic attainment in terms of education, occupational prestige and income compared to immigrant women of not visible minority (Table 29-31). This can be explained by lower parental expectation to immigrant women of visible minority for educational attainment. Moreover, there is a direct effect of visible minority status on the income attainment of immigrant women.

This is consistent with previous research conducted by Boyd (2002), Basavarajappa and Jones (1999), deSilva (1996), Bloom et al. (1995), and Miller (1992). Basavarajappa and Jones (1999) found that visible minority immigrant women had lower income attainment compared to their nonvisible minority counterparts. In addition, they found that for the same numbers of years of schooling, monetary benefits are lower for the visible minorities compared to their nonvisible minority counterparts. They argued that because of lack of recognition of their educational credentials, visible minority immigrants fail to enter their desired profession or to achieve occupational status commensurate with educational attainments.

6.6 Socioeconomic attainment: Age at immigration and visible minority status

Age at immigration is an important determinant of socioeconomic attainment for immigrant women of visible minority. For example, in this research, it was found that child immigrant women of visible minority had higher educational attainment, higher

occupational prestige and higher income attainment at age 30 compared to teen immigrant women of visible minority, of the same age group (Table 26-28). The theory developed explains that higher parental expectation and higher ability to learn English/French lead to higher educational attainment for child immigrant women of visible minority, which in turn leads to higher occupational prestige and higher income at age 30 compared to teen immigrant women of visible minority. This is consistent with previous research conducted by Trovato and Grindstaff (1986), Inbar and Adler (1976), Jones (1981, 1987), and Cahen et al. (2001). Overall, these studies have found a clear negative association between age at immigration and socioeconomic attainment.

In addition, the interaction effect of age at immigration and visible minority status shows that child immigrant women of visible minority are likely to have higher educational attainment, higher occupational prestige and higher income attainment at age 30 compared to teen immigrant women of not visible minority. It suggests that age at immigration is a strong determinant of socioeconomic attainment for immigrant women. Similar findings were reported by Hou and Balakrishnan (1996). Over all, they found that those who immigrated to Canada at earlier ages (lass than 10 years of age at immigration) had higher educational attainment than later arrivals (10-19 years of age at immigration) of the same ethnic origin. Regardless of being visible minority or not, the British, French, Polish, Blacks, Chinese, South Asians and others who immigrated below 10 years of age had higher proportion of university education than the Canadian-born (Hou and Balakrishnan 1996).

Chapter 7

7. 1 Conclusion

This study arrives at five basic conclusions. First, age at immigration is a strong determinant of socioeconomic attainment for immigrant women at age 30. Child immigrant women had higher educational attainment and higher occupational prestige and higher income attainment at age 30 compared to teen immigrant women. This can be explained by higher parental expectation for educational attainment to child immigrant women and child immigrant women's higher ability to learn English and/French. Higher parental expectation and higher ability to learn official languages lead to higher educational attainment for child immigrant women, which in turn leads to higher occupational prestige and higher income at age 30. This is consistent with previous research conducted by Trovato and Grindstaff (1986), Jones (1981), Halli and Vedanand (2007), Cahen et al. (2001) and Schaafsma and Sweetman (2001). However, in the present study, no evidence was found for the support of "vulnerable age hypothesis" introduced by Inbar and Adler (1976, 1977).

Second, both child immigrant women and teen immigrant women had higher income attainment at age 30 compared to women of third generation and over. This can be articulated by the fact that immigrant parents' higher expectation to their children had a pivotal impact on the higher income attainment of their offspring. In this study, fathers' education has been used as the proxy to parental expectation to their children. Therefore, it can be said that fathers' education had a pivotal impact on the income attainment of their offspring. Similar findings were reported by Boyd (2002) for the 1.5 generation. However, Warman and Worswick (2004) found that immigrants had lower income

attainment compared to the Canadian-born. But they did not look the specific categories of child immigrant women and teen immigrant women.

Third, the second generation women had higher income attainment at age 30 compared to women of third generation and over. The reason for second generation success can be attributed to greater parental expectation and higher language proficiency. Overall, these findings are consistent with "straight-line' assimilation theory, which suggests that successive generation of immigrants will have higher integration to the mainstream society. However, no evidence of "second-generation" decline was found.

Fourth, country/region of birth is another important predictor of income attainment for immigrant women. Immigrant women who were born in the United States and Europe had higher income attainment at age 30 than women of third generation and over. However, immigrant women who were born in Asia, Africa and other (Central America, South America and Caribbean, Oceania and other) regions had lower income attainment at age 30 compared to women of third generation and over. Part of the reason might be that their educational credentials and occupational skills in abroad are not recognized by the host country.

Finally, immigrant women of visible minority had lower educational attainment, lower occupational prestige and lower income attainment at age 30 compared to immigrant women of not visible minority. The theory developed explains that parents have lower expectation to their visible minority immigrant children, which in turn leads to lower educational attainment, lower occupational prestige and lower income attainment for visible minority immigrant women at age 30 compared to immigrant

women of not visible minority. Overall, this findings support the "segmented-assimilation" theory.

7.2 Limitations and recommendations

Certainly, there are several limitations of this study. First, in this research I have only looked at the socioeconomic attainment of immigrant women. I did not look at the socioeconomic attainment of immigrant men. A comparative analysis of the socioeconomic attainment of both immigrant men and immigrant women would permit better insight for the effect of age at immigration.

Second, in this research, second generation included both: (1) one parent born outside Canada; and (2) both parents born outside Canada. A separate analysis for the second generation of one parent born outside Canada, and the second generation of both parents born outside Canada would be quite interesting because previous research shows that parental resources are important determinants for socioeconomic attainment of children of immigrants. Thus, in future research, the hypothesis that can be tested is that immigrant parents have greater impact on the socioeconomic attainment of their offspring than that of native born parents.

Third, in this research, I have only looked at the socioeconomic attainment of visible minority women in general but a separate analysis of each subgroup (i.e., first generation visible minority, second generation visible minority and third generation visible minority) would provide better interpretation for visible minority immigrant women. Therefore, in future research, the focus of attention should be given to examine to what extent second generation women of visible minority are assimilating in terms of socioeconomic attainment into the host society compared with the first generation women

or the third generation women of visible minority. This would also permit us to explain why subsequent generations of immigrant visible minority experience racial and ethnic discrimination in the host society.

Finally, analysis of immigrant women's socioeconomic attainment by CMAs and non CMAs would be another interesting study. Because the socioeconomic attainment of immigrant women who live in CMAs would differ significantly from those who live in non CMAs. This is because those who live in CMAs would have greater access to education and job opportunities. Thus the hypothesis that can be tested in future research is that immigrants who live in CMAs would have higher socioeconomic attainment compared to those who live in non CMAs.

References

Alba, R., Logan, J., Lutz, A., & Stults, B. (2002). Only English by the third generation? loss and preservation of the mother tongue among the grandchildren of contemporary immigrants. *Demography, 39*(3), 467.

Alba, R., & Nee, V. (1997). Rethinking assimilation theory for a new era of immigration. *International Migration Review, 31*(4), 826-874.

Asher, J. J., & Garcia, R. (1969). The optimal age to learn a foreign language. *The Modern Language Journal, 53*(5), 334-341.

Basavarajappa, K.G., & Jones, F. (1999). *Visible Minority Income Differences.* In Shiva S. Halli and Leo Driedger eds. *Immigrant Canada: Demographic Economic and Social Challenges* Toronto, University of Toronto Press.

Bloom, D. E., & Grenier, G. (1995). The changing labour market position of Canadian immigrants. *Canadian Journal of Economics, 28*(4), 987.

Borjas, G. J. (1987). Self-selection and the earnings of immigrants. *American Economic Review, 77*(4), 531.

Boyd, M. (2008). Variations in Socioeconomic Outcomes of Second Generation Young Adults. *Canadian Diversity, 6(2),* 20-24.

Boyd, M. (2002). Educational attainments of immigrant offspring: Success or segmented assimilation? *International Migration Review, 36*(4), 1037-1060.

Boyd, M. (1992). *Gender Issues in Immigration Trends and Language Fluency: Canada and the United States.* In Barry R. Chiswick, ed., *Immigration Language and Ethnic Issues: Public Policy in Canada and the United States.* Washington, D.C.: American Enterprise Institute.

Boyd, M. (1985). *"Ascription and Achievement: Studies in Mobility and Status Attainment in Canada" Ottawa*: Carleton University Press.

Boyd, M., & Grieco, E. M. (1998). Triumphant transitions: Socioeconomic achievements of the second generation in Canada. *International Migration Review, 32*(4), 853-876.

Boyd, M., & Norris, D. (1995). ``*Generating Success: Educational and Occupational Achievements of the Second Generation in Canada*`` Working Paper, Centre for the Study of Population, Florida State University

Cahan, S., Davis, D., & Staub, R. (2001). Age at immigration and scholastic achievement in school-age children: Is there A vulnerable age? *International Migration Review, 35*(2), 587-595.

Chiswick, B. R., Lee, Y. L., & Miller, P. W. (2005). A longitudinal analysis of immigrant occupational mobility: A test of the immigrant assimilation hypothesis. *International Migration Review, 39*(2), 332-353.

Collier, V. P. (1987). Age and rate of acquisition of second language for academic purposes. *TESOL Quarterly, 21*(4), 617-641.

Conzen, K. N., & Gerber, D. A. (1992). The invention of ethnicity: A perspective from the U.S.A. *Journal of American Ethnic History, 12*(1), 3.

deSilva, A. (1996). *Discrimination Against Visible Minority Men.* Working Paper #W-96-6E, Human Resources Development Canada.

Edmonston, B. (2002). "*Interprovincial Migration of Canadian Immigrants*" Population Research Center, Portland State University.

Ellis, M., & Goodwin-White, J. (2006). 1.5 generation internal migration in the U.S.: Dispersion from states of immigration? *International Migration Review, 40*(4), 899-926.

England, K., and Stiell, B. (1997). *"They Think You are as Stupid as Your English is": Constructing Foreign Domestic Workers in Torento"* Environment and Planning 29: 195-215.

Feliciano, C. (2005). Does selective migration matter? explaining ethnic disparities in educational attainment among immigrants' children. *International Migration Review, 39*(4), 841-871.

Feliciano, C., & Rumbaut, R. G. (2005). Gendered paths: Educational and occupational expectations and outcomes among adult children of immigrants. *Ethnic & Racial Studies, 28*(6), 1087-1118.

Feng Hou, & Balakrishnan, T. R. (1996). The integration of visible minorities in contemporary Canadian society. *Canadian Journal of Sociology, 21*(3), 307.

Fong, E., & Shibuya, K. (2005). Multiethnic cities in north America. *Annual Review of Sociology, 31*(1), 285-304.

Gans, H. J. (1997). Toward a reconciliation of "assimilation" and "pluralism": The interplay of acculturation and ethnic retention. *International Migration Review, 31*(4), 875-892.

Gans, H. J. (1973). "Introduction". In Ethnic Identity and Assimilation: The Polish Community, Ed. N Sandberg. New York: Praeger.

Gibson, M. A. (1989). Accommodation without Assimilation: Sikh Immigrants in an American High School. *Ithaca, N.Y.: Cornell University Press,* p.268. Cited from Portes, A. (1995). The Economic Sociology Immigration: Essays on Networks, Ethnicity, and Entrepreneurship. *New York, Russell Sage Foundation,* p. 250.

Giles, W., & Preston, v. (1996). The Domestication of Women's Work: A Comparison of Chinese and Portuguese Immigrant Women Home workers *Studies in Political Economy 51*: 147-182

Glazer, N., & Moynihan, D.P. (1970). Beyond the Melting Pot: The Negros, Puerto

Ricans, Jews, Italians, and Irish of New York City. *1963. Reprint. Cambridge*

Gordon, M. M. (1964). Assimilation in American Life: The Role of Race, Religion, and National Origins *New York, Oxford University Press* pp. 70-71

Goyder, J. (2005). The dynamics of occupational prestige: 1975-2000. *Canadian Review of Sociology & Anthropology, 42*(1), 1-23.

Greely, A. (1977). The American Catholic: A Social Portrait. *New York: Basic Books*

Halli, S., & Vedanand. (2007). The problem of second-generation decline: Perspectives on integration in Canada. *Journal of International Migration & Integration, 8*(3), 277-287.

Hiebert, D. (1999). Local geographies of labor market segmentation: Montreal, Toronto, and Vancouver, 1991. *Economic Geography, 75*(4), 339-369.

Hiebert, D. (1997). "*The color of work: Labor Market Segmentation in Montreal, Torento and Vancouver,* 1991" Working Paper #97-02 (Vancouver: Vancouver Centre of Excellence for Research on Immigration and Integration in the Metropolis)

.....(2000). "*Ethnicity' in the Dictionary of Human Geography"* ed . Johnston, R.J. et al. (Oxford and Malden, MA: Blackwell) 235-238

Inbar, M. (1977). Immigration and learning: The vulnerable age. *Canadian Review of Sociology & Anthropology, 14*(2), 218.

Inbar, M., & Adler, C. (1976). The vulnerable age: A serendipitous finding. *Sociology of Education, 49*(3), 193-200.

Jantzen, L. (2008). Who is the Second Generation? A Description of their Ethnic Origins and Visible Minority Composition by Age. *Canadian Diversity, 6(2),* 7-12.

Jones, F. E. (1981). Age at immigration and educational attainment. *Canadian Review of Sociology & Anthropology, 18*(3), 393.

Jones, F. E. (1987). Age at immigration and education: Further explorations. *International Migration Review, 21*(1), 70-85.

Kao, G. (2004). Parental influences on the educational outcomes of immigrant youth. *International Migration Review, 38*(2), 427-449.

Kao, G., & Tienda, M. (1995). Optimism and achievement: The educational performance of immigrant youth. *Social Science Quarterly (University of Texas Press), 76*(1), 1-19.

Ley, D., & Smith, H. (1997). *Immigration and poverty in Canadian cities, 1971-1991*

Li, P. S., & Dong, C. (2007). Earnings of Chinese immigrants in the enclave and mainstream economy. *Canadian Review of Sociology & Anthropology, 44*(1; 1), 65-99.

Lieberson, S. (1973). Generational differences among blacks in the north. *American Journal of Sociology, 79*(3), 550-565.

Liu, X., & Norcliffe, G. (1996). Closed windows, open doors: Geopolitics and post-1949 mainland Chinese immigration to Canada. *Canadian Geographer, 40*(4), 306.

Massey, D. S. (1995). The new immigration and ethnicity in the united states. *Population & Development Review, 21*(3), 631-652.

Miller, P. W. (1992). The earnings of Asian male immigrants in the Canadian labor market. *International Migration Review, 26*(4), 1222-1247.

Murdie, R.A. (1998). "*The welfare State, Economic Restructuring and Immigrant Flows: Impacts on Sociospatial Segregation in Greater Torento in Urban Segregation and Welfare State: Inequality and Exclusion in Western Cities"* ed S. Mustard and W. ostendrof (London: Routledge) 64-93

Neider, L., & Farley, R. (1985). Assimilation in the United States: An Analysis of the Ethnic and Generation Differences in Status and Achievement. *American Sociological Review, 50,* 840-850.

Palameta, B. (2007). Economic Integration of Immigrants' Children. *Statistics Canada 2007* Catalogue No. 75-001-XIE pp.5-15

Piche, V., & Renaud, J., and Gingras, S. (1999). Comparative Immigrant Economic

Integration. In Shiva S. Halli and Leo Driedger, ed., *Immigrant Canada: Demographic, Economic and Social Challenge* Toronto, University of Toronto Press

Picot, G. (2004). *The Deteriorating Economic Welfare of Canadian Immigrants*

Picot, G., Hou, F., & Coulombe, S. (2008). Poverty dynamics among recent immigrants to Canada. *International Migration Review, 42*(2), 393-424.

Picot, G., Hou, F., & Coulombe, S. (2008). Poverty dynamics among recent immigrants to Canada. *International Migration Review, 42*(2), 393-424.

Portes, A. (2007). Migration, development, and segmented assimilation: A conceptual review of the evidence. *The Annals of the American Academy of Political and Social Science, 610*(1), 73-97.

Portes, A., Fernández-Kelly, P., & Haller, W. (2005). Segmented assimilation on the ground: The new second generation in early adulthood. *Ethnic & Racial Studies, 28*(6), 1000-1040.

Portes, A., & Rumbaut, R. (2005). Introduction: The second generation and the children of immigrants' longitudinal study. *Ethnic & Racial Studies, 28*(6), 983-999.

Portes, A. and Rumbaut, R. (1996). "*Immigrant America: A Portrait" 2nd ed. Berkeley University of California Press.*

Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy of Political and Social Science, 530*(1), 74-96.

Portes, A., & Zhou, M. (1996). Self-employment and the earnings of immigrants. *American Sociological Review, 61*(2), 219-230.

Portes, A. and Zhou, M. (1995). *"Divergent Destinies: Immigration, Poverty and Entrepreneurship in the United States"* In *Poverty, Inequality and the Future of Social Policy.* Ed. K. McFate, R. Lawton, and W.J. Wilson. New York: Russell Sage Foundation. P. 47-520

Pratt, G. (1997). Stereotypes and ambivalence: The construction of domestic workers in Vancouver, British Columbia. *Gender, Place & Culture: A Journal of Feminist Geography, 4*(2), 159.

Ram, B., & and Shin, Y. E. (1999). *"Internal Migration of Immigrants"* In *Immigrant Canada: Demographic, Economic, and Social Challenges* Ed. Halli, Shivas S. and Driedger, Leo. University of Torento Press p. 14-162

Redstone Akresh, I. (2007). Contexts of English language use among immigrants to the united States1. *International Migration Review, 41*(4), 930-955.

Sandberg, N. (1993). Ethnic Identity and Assimilation: The Polish Community, New York Praeger

Schaafsma, J., & Sweetman, A. (2001). Immigrant Earnings: Age at Immigration Matters. *The Canadian Journal of Economics, 34(4),* 1066-1099.

Statistics Canada. (2003). *"Aboriginal Peoples of Canada Immigration and Citizenship Ethnocultural Portrait of Canada"* 2001 Census Release-5 January 21.

Statistics Canada, The Daily 2007. *"Study: Low Income Rates among Immigrants Entering Canada"* (Tuesday, January 30)

Trovato, F., & Grindstaff, C. F. (1986). Economic status: A census analysis of thirty-year-old immigrant women in Canada. *Canadian Review of Sociology & Anthropology, 23*(4), 569.

van Tubergen, F., Maas, I., & Flap, H. (2004). The economic incorporation of immigrants in 18 western societies: Origin, destination, and community effects. *American Sociological Review, 69*(5), 704-727.

Walters, D., Phythian, K., & Anisef, P. (2007). The acculturation of Canadian immigrants: Determinants of ethnic identification with the host society. *Canadian Review of Sociology & Anthropology, 44*(1; 1), 37-64.

Warman, C. R., & Worswick, C. (2004). Immigrant earnings performance in Canadian cities: 1981 through 2001. *Canadian Journal of Urban Research, 13*(1), 62-84.

Warner, W.L., & Srole, L. (1945). The Social Systems of Americans Ethnic Groups. *New Heaven, CT: Yale University press.*

White, J., Maxim, P., & Gyimah, S. O. (2003). Labour force activity of women in Canada: A comparative analysis of aboriginal and non-aboriginal women. *Canadian Review of Sociology & Anthropology, 40*(4), 391-415.

List of Figures:

Figure 1: Conceptual framework for immigrant women of 30-years old: Age at immigration model

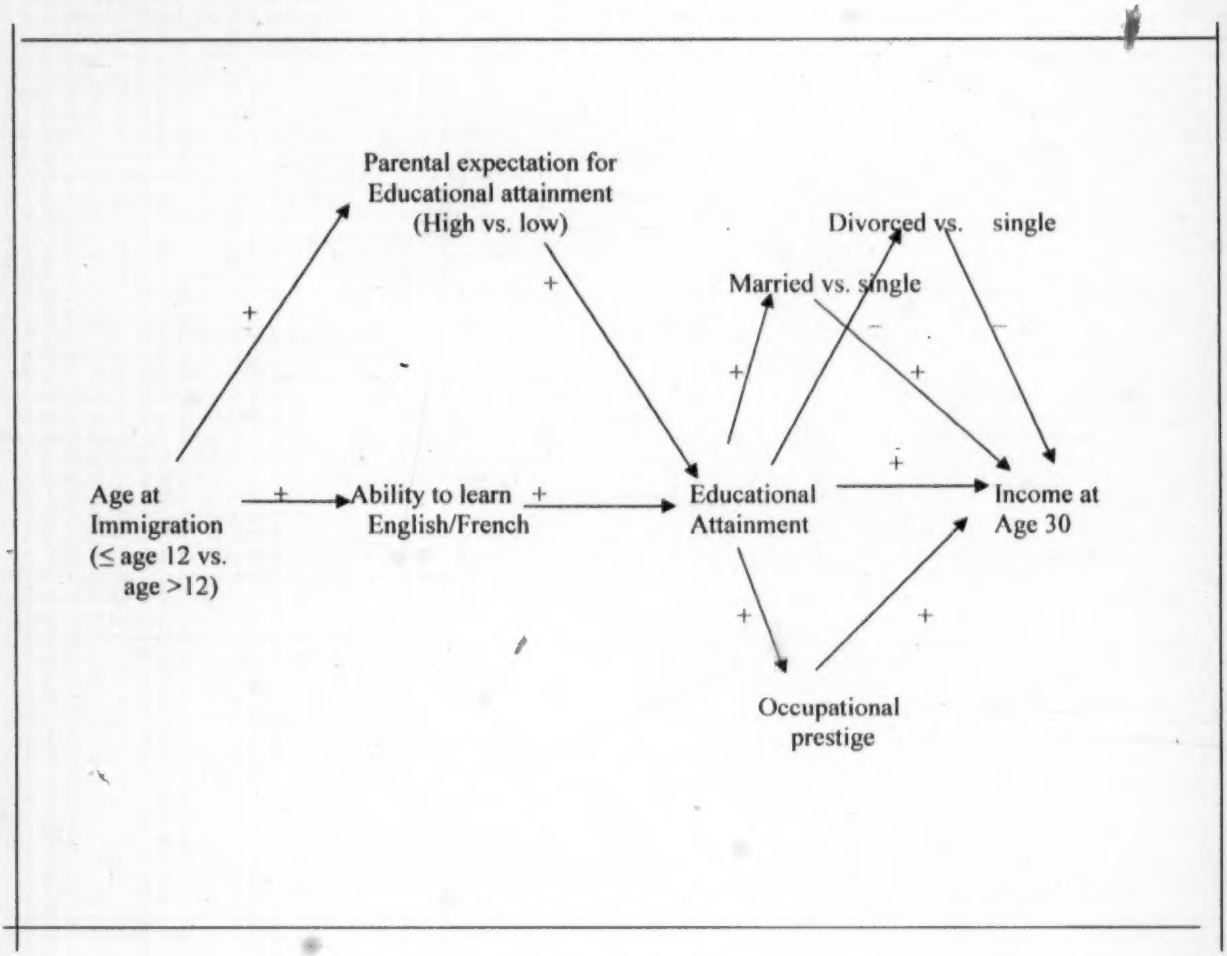

Parental expectation for Educational attainment (High vs. low)
Divorced vs. single
Married vs. single
Age at Immigration (≤ age 12 vs. age >12)
Ability to learn English/French
Educational Attainment
Income at Age 30
Occupational prestige
+
+
+

Figure 2: Conceptual framework: Generation status model

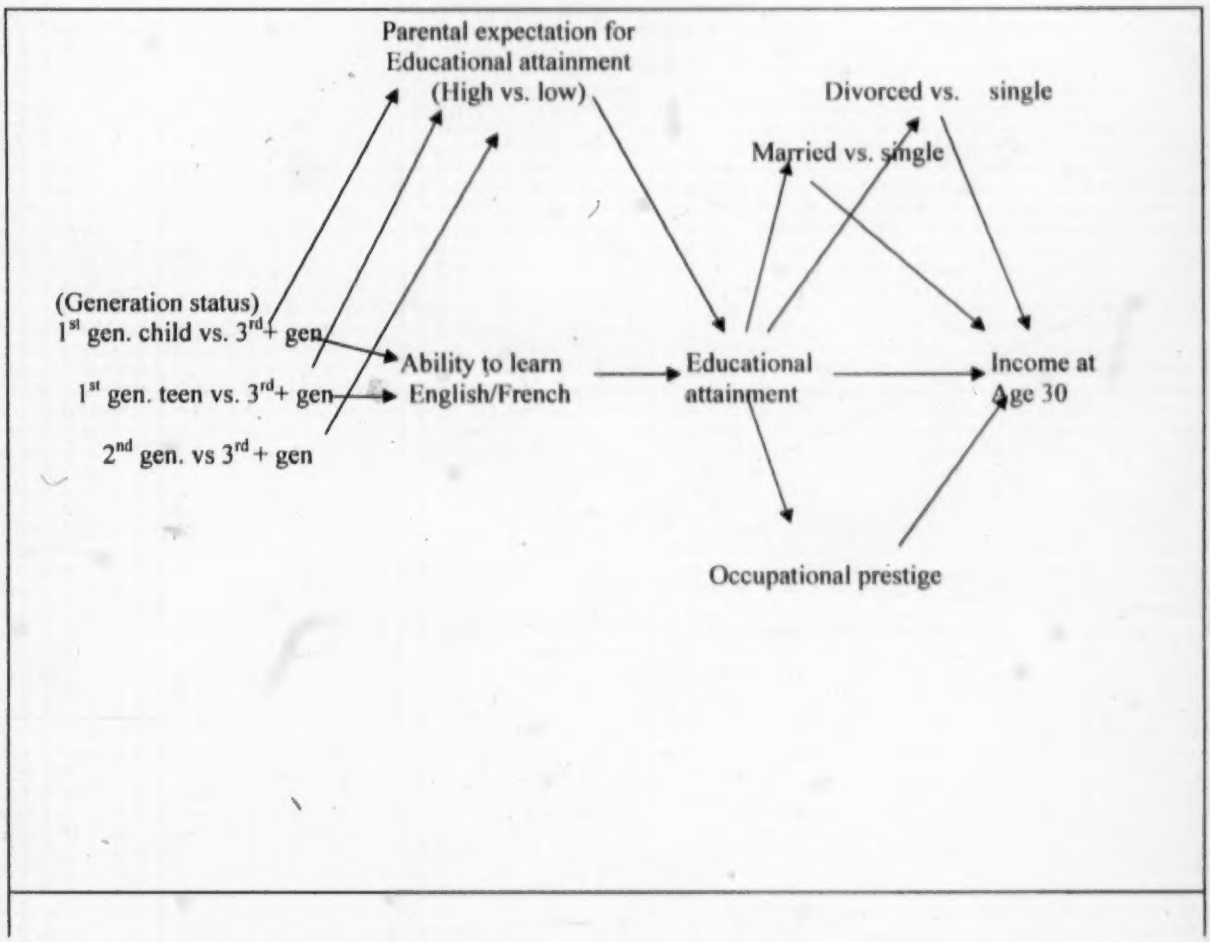


Figure 3: Conceptual framework: Visible minority model (Immigrants only)

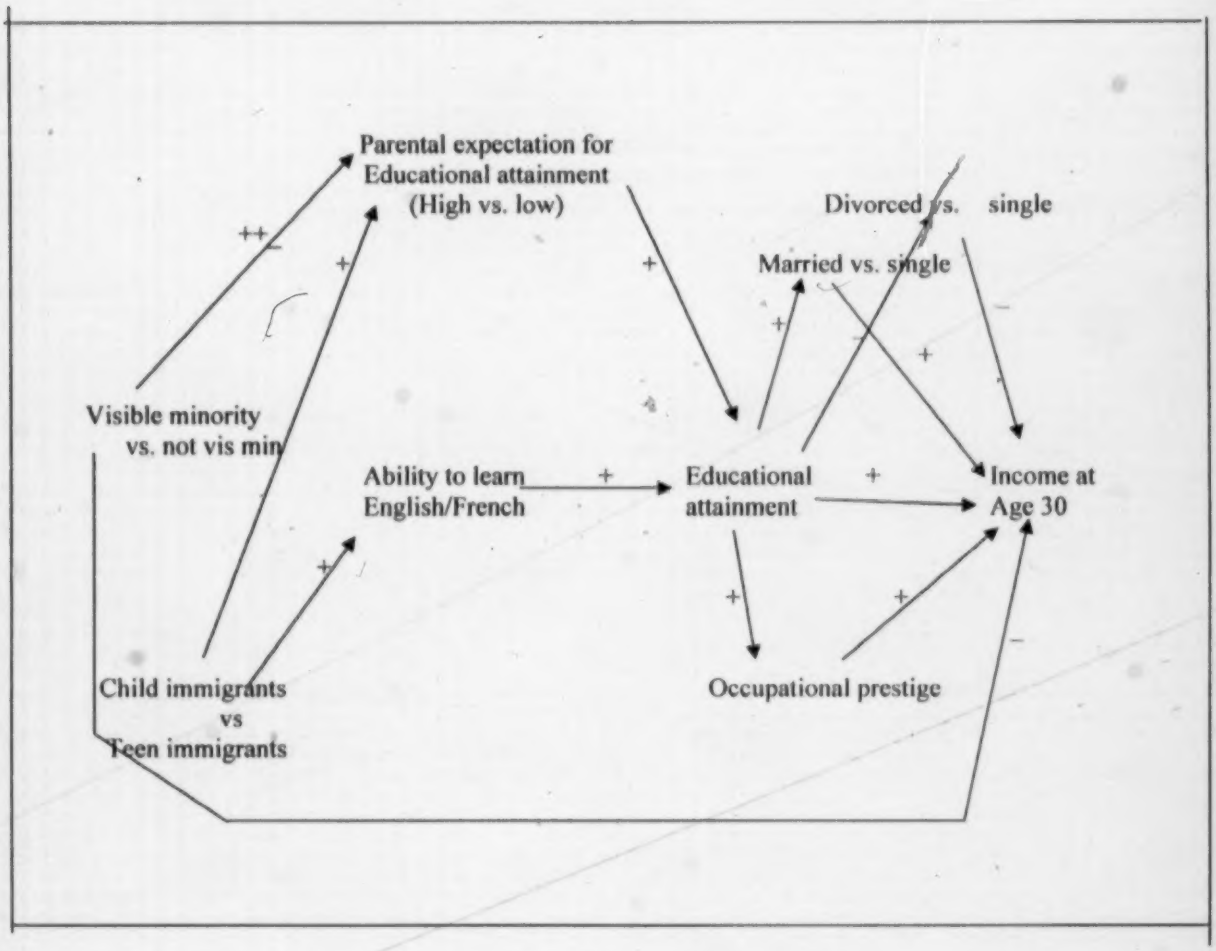
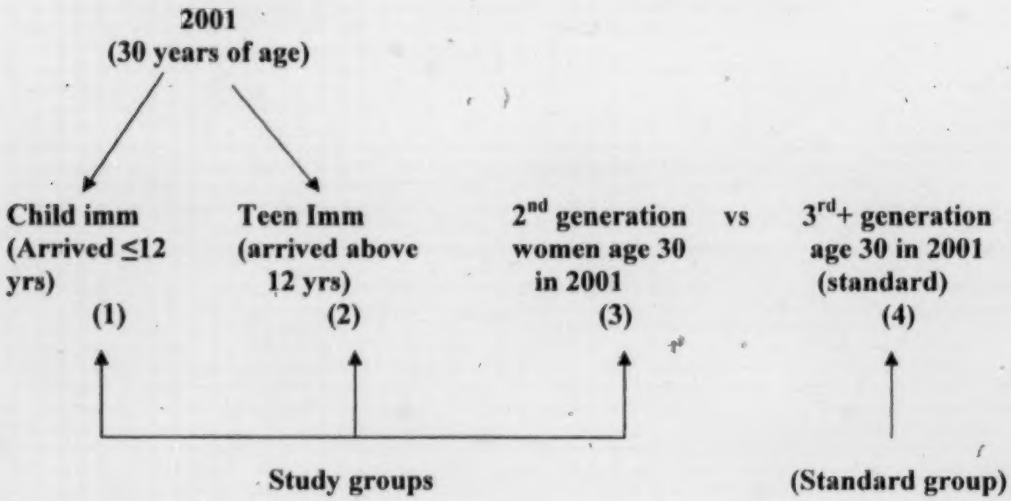


Figure 4: Comparison between study groups and the standard group



List of Tables:

Table 1: Sample characteristics: 30-year old women in 2001 Census

Sample characteristics		Percentage (frequency)
Marital status (Immigrants)		
Divorced		3.7 (1737)
Legally married and not separated		64.0 (29673)
Separated but still legally married		3.7 (1738)
Never legally married-Single		28.1 (13021)
Widowed		0.4 (185)
Total		*100.0 (46,354)*
Age at Immigration		
0-4 years		9.6 (4107)
5-12 years		13.9 (5959)
13-19 years		15.9 (6804)
20-24 years		27.8 (11912)
25-29 years		28.7 (12,317)
30-34 years		4.2 (1813)
Total		*100.0 (42,912)*
Knowledge of official language (Immigrants)		
English only		78.4 (36,359)
French only		4.2 (1926)
Both English and French		14.1 (6517)
Neither English nor French		3.3 (1552)
Total		*100.0 (46,354)*
Visible Minority Status (Immigrants)		
Visible minority		67.2 (31,140)
Not visible minority		32.8 (15,214)
Total		*100.0 (46,354)*
Education (Immigrants)		
Primary education		3.8 (1778)
Secondary education		22.1 (10240)
Post secondary education		74.1 (34335)
Total		*100.0 (46,353)*
Occupation (Immigrants)		
High prestige		19.5 (7033)
Medium prestige		3.2 (1147)
Low prestige		77.3 (27,888)
Total		*100.0 (36,068)*
Income (Immigrants)		
Low income		72.3 (35,517)
Middle income		24.0 (11,135)
High income		3.7 (1703)
Total		*100.0 (46,355)*
Generation Status		
1st generation (immigrants)		22.2 (46,354)
2nd generation		16.3 (34,127)
3rd generation		61.5 (128,513)
Total		*100.0 (208,994)*

Table 2: Age at immigration and level of education (in per cent)

Level of education	Female	
	Teen immigrants	Child immigrants
Primary	5.4	1.9
Secondary	27.2	22.0
Post secondary	67.4	76.1
Total	100.0 (N=6804)	100.0 (N=10066)

Chi-Square=243.98, df=2, p<0.001

Table 3: Age at immigration and occupational prestige (in per cent)

Occupational prestige	Female	
	Teen immigrants	Child immigrants
High prestige	18.1	23.6
Medium prestige	2.7	3.7
Low prestige	79.2	72.7
Total	100.0 (N=5509)	100.0 (N=9104)

Chi-Square=76.67, df=2, p<0.001

Table 4: Age at immigration and level of income (in per cent)

Level of income	Female	
	Teen immigrants	Child immigrants
Low income	60.3	51.1
Middle income	34.2	43.4
High income	5.4	5.5
Total	100.0 (N=6804)	100.0 (10066)

Chi-Square=148.99, df=2, p<0.001

Table 5: Generation status and Level of income (in per cent)

Level of income	Female		
	1st generation	2nd generation	3rd generation
Low	72.3	55.9	66.9
Middle	24.0	37.1	30.0
High	3.7	7.0	3.1
Total	100.0 (N=46355)	100.0 (N=34128)	100.0 (N=128512)

Chi-Square=3029.37, df=4, p<0.001

Table 6: Age at Immigration and level of education for visible minority women aged 30 in 2001 (in per cent)

Level of education	Female	
	Teen Immigrant women	Child Immigrant women
Primary	5.9	0.8
Secondary	28.1	19.2
Post secondary	65.9	80.0
Total	100.0 (N= 4992)	100.0 (N= 4808)

Chi-Square=340.758, df=2, p<0.001

Table 7: Age at Immigration and occupational prestige for visible minority women aged 30 in 2001 (in per cent)

Occupational prestige	Female	
	Teen Immigrant women	Child Immigrant women
High prestige	19.6	21.9
Medium prestige	2.8	2.5
Low prestige	77.6	75.6
Total	100.0 (N= 3956)	100.0 (N=8357)

Chi-Square=6.573, df=2, p<0.05

Table 8: Age at Immigration and level of income for visible minority women aged 30 in 2001 (in per cent)

Level of income	Female	
	Teen Immigrant women	Child Immigrant women
Low income	63.0	51.5
Middle income	32.6	39.2
High income	4.4	9.2
Total	100.0 (N= 4992)	100.0 (N= 4808)

Chi-Square=167.961, df=2, p<0.001

Table 9: Educational attainment by visible minority status (in per cent)

Level of education	Female	
	Visible minority	Not visible minority
Primary	4.5	2.5
Secondary	24.1	18.0
Post secondary	71.4	79.5
Total	100.0 (N= 31,140)	100.0 (N= 15,214)

Chi-Square=3.780, df=2, p<0.001

Table 10: Occupational prestige by visible minority status (in per cent)

Occupational prestige	Female	
	Visible minority	Not visible minority
High prestige	15.8	26.5
Medium prestige	3.3	2.9
Low prestige	80.9	70.6
Total	100.0 (N= 23,481)	100.0 (N= 12,588)

Chi-Square=6.000, df=2, p<0.001

Table 11: Income attainment by visible minority status (in per cent)

Income attainment	Female	
	Visible minority	Not visible minority
Low income	75.7	65.5
Middle income	21.0	30.1
High income	3.3	4.4
Total	100.0 (N= 31,139)	100.0 (N= 15,214)

Chi-Square=5.331 , df=2, p<0.001

Table 12: Educational attainment of 30-year-old immigrant women in 2001

Variables	Model-1 B	Model-2 B	Model-3 B	Model-4 B
Constant	14.027	13.951	11.258	8.163
Age at Immigration (Child=1, Teen=0)	1.044**	1.056**	1.108**	0.991**
Marital Status				
Married		0.139**	0.133**	0.089
Divorced		-0.162	-0.120	-0.120
Single (R)				
Fathers' education			0.200**	0.179**
Language proficiency				1.637**
R^2	0.026	0.027	0.030	0.080
Model F	443.729**	151.905**	130.477**	294.938**
df	(1 & 16,868)	(3 & 16,866)	(4 & 16,865)	(5 & 16,864)
R^2 change		0.001	0.003	0.050
F test for R^2 change		5.865**	64.479**	924.210**
df		(2 & 16,865)	(1 & 16,864)	(1 & 16,863)
N	16,870	16,870	16,870	16,870

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 13: Occupational prestige of 30-year-old immigrant women in 2001

Variables	Model-1 B	Model-2 B	Model-3 B	Model-4 B
Constant	6.571	6.760	4.369	6.403
Age at Immigration (Child=1, Teen=0)	1.218**	1.174**	1.108**	0.581**
Marital status Married		-0.117	-.146*	-0.176**
Divorced		-2.008**	-2.003**	-1.682**
Single (R)				
Language proficiency			1.154**	0.259**
Education				0.649**
R^2	0.021	0.032	0.047	0.261
Model F	317.049**	163.367**	179.309**	1032.009**
df	1 & 14,611	3 & 14,609	4 & 14,608	5 & 14,607
R^2 change		0.011	0.014	0.214
F test for R^2 change		84.709**	219.794**	4234.928**
df		2 & 14,608	1 & 14,607	1 & 14,606
N	14,613	14,613	14,613	14,613

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 14: Income attainment of 30-year-old immigrant women

(Natural Logarithm of income)

Variables	Model-1 B	Model-2 B	Model-3 B	Model-4 B
Constant	10.011	9.959	9.974	9.585
Age at Immigration (Child=1, Teen=0)	0.094**	0.104**	0.057**	0.024
Marital status				
Married		0.069**	0.065**	0.074**
Divorce		0.190**	0.217**	0.311**
Single (R)				
Education			0.053**	0.016**
Occupational Prestige				0.056**
R^2	0.002	0.004	0.030	0.070
Model F	31.842**	21.934**	112.076**	218.411**
df	1 & 14,611	3 & 14,609	4 & 14,608	5 & 14,607
R^2 change		0.002	0.026	0.040
F test for R^2 change		16.946**	380.789**	624.616**
df		2 & 14,608	1 & 14,607	1 & 14,606
N	14,613	14,613	14,613	14,613

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 15: Income attainment of child immigrant women in 2001

Variables	Model-1 B	Model-2 B	Model-3 B
Constant	10.029	10.007	9.633
Marital Status			
Married	0.146**	0.125**	0.089*
Divorced	0.121**	0.171**	0.231**
Single (R)			
Education		0.049**	0.017**
Occupational prestige			0.052**
R^2	0.007	0.033	0.078
Model F	31.756**	102.193**	192.835**
df	2 & 9101	3 & 9100	4 & 9,099
R^2 change		0.026	0.046
F test for R^2 change		241.390**	449.646**
df		1 & 9,099	1 & 9,098
N	9104	9104	9104

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 16: Income attainment of teen immigrant women in 2001

Variables	Model-1 B	Model-2 B	Model-3 B
Constant	10.034	10.032	9.543
Marital Status Married	-0.065*	-0.036	0.065*
Divorced	0.243**	0.241**	0.416**
Single (R)			
Education		0.056**	0.012*
Occupational prestige			0.062**
R^2	0.04	0.027	0.059
Model F	11.630**	50.265**	86.086**
df	2 & 5506	3 & 5505	4 & 5504
R^2 change		0.022	0.032
F test for R^2 change		127.003**	188.415**
df		1 & 5505	1 & 5504
N	5509	5509	5509

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 17: Income of third+ generation women in 2001

Variables	Model-1 B	Model-2 B	Model-3 B
Constant	9.909	9.882	9.630
Marital Status			
Married	-0.029**	-0.035**	-0.052**
Divorced	0.108**	0.108**	0.117**
Single (R)			
Education		0.093**	0.069**
Occupational prestige			0.036**
R^2	0.001	0.069	0.083
Model F	37.067**	2752.238**	2506.344**
df	2 & 110,578	3 & 110,577	4 & 110,576
R^2 change		0.068	0.014
F test for R^2 change		8177.099**	1645.843**
df		1 & 110,576	1 & 110,575
N	110,581	110,581	110,581

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 18: Comparison of income attainment between child immigrant women and 3rd+ generation women

Variables	Income	
	Child immigrants	3rd+ generation
	B (SE)	B (SE)
Constant	9.633 (0.022)	9.630 (0.008)
Marital status		
Married	0.089** (0.018)	-0.052**[1] (0.006)
Divorced	0.231** (0.043)	0.117**[1] (0.016)
Single (R)		
Education	0.017** (0.003)	0.069**[1] (0.001)
Occupational prestige	0.052** (0.002)	0.036**[1] (0.001)
R^2	0.078	0.083
Model F	192.835**	2506.344**
Df	4 & 9099	4 & 110,576
N	9,104	110,581

** Significant at 0.05 levels, **significant at 0.01 levels*

[1]Difference between slopes of income (column 1 and column 2) is statistically significant (t-test, $p<0.05$).

Table 19: Comparison of income attainment between teen immigrant women and women of 3rd+ generation

Variables	Income	
	Teen immigrants	3rd+ generation
	B (SE)	B (SE)
Constant	9.543 (0.044)	9.630 (0.008)
Marital status		
Married	0.065* (0.033)	-0.052**[1] (0.006)
Divorced	0.416** (0.067)	0.117**[1] (0.016)
Single (R)		
Education	0.012* (0.006)	0.069**[1] (0.001)
Occupational prestige	0.062** (0.005)	0.036**[1] (0.001)
R^2	0.059	0.083
Model F	86.086**	2506.344**
Df	4 & 5504	4 & 110,576
N	5,509	110,581

** Significant at 0.05 levels, **significant at 0.01 levels*

[1] Difference between slopes of income (column 1 and column 2) is statistically significant (t-test, $p<0.05$).

Table 20: Income of Second generation women in 2001

Variables	Model-1 B	Model-2 B	Model-3 B
Constant	10.012	9.996	9.567
Marital Status			
Married	-0.021	-0.013	-0.037**
Divorced	0.208**	0.272**	0.210**
Single (R)			
Education		0.065**	0.029**
Occupational prestige			0.057**
R^2	0.001	0.025	0.053
Model F	19.869**	260.524**	431.051**
df	2 & 30,900	3 & 30,899	4 & 30,898
R^2 change		0.023	0.028
F test for R^2 change		740.881**	919.402**
df		1 & 30,898	1 & 30,897
N	30,903	30,903	30,903

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 21: Comparison of income attainment between 2nd generation women and women of third generation and over

Variables	Income	
	2nd generation	3rd+ generation
	B (SE)	B (SE)
Constant	9.567 (0.017)	9.630 (0.008)
Marital status		
Married	-0.037** (0.013)	-0.052** (0.006)
Divorced	0.210** (0.036)	0.117**[1] (0.016)
Single (R)		
Education	0.029** (0.003)	0.069**[1] (0.001)
Occupational prestige	0.057** (0.002)	0.036**[1] (0.001)
R^2	0.053	0.083
Model F	431.051**	2506.344**
Df	4 & 30,898	4 & 110,576
N	30,903	110,581

** Significant at 0.05 levels, **significant at 0.01 levels*

[1]Difference between slopes of income (column 1 and column 2) is statistically significant (t-test, $p<0.05$).

Table 22: Test of significance (t-test) for the difference of slopes

Contrast			
T-test for slope	**Child immigrants vs 3rd+ generation**	**Teen immigrants vs 3rd+ generation**	**2nd generation vs 3rd+ generation**
Given variables	t-value	t-value	t-value
Model for Education			
Married	1.115	-3.016**	-7.190**
Divorced	-5.192**	3.583**	-9.927**
Single (R)			
Fathers' education	-9.879**	-10.586**	-1.25
Model for Occupation			
Married	2.587**	-21.749**	1.060
Divorced	-4.733**	-12.691**	11.08**
Single (R)			
Education	-6.296**	1.816	-7.480**
Model for Income			
Married	7.412**	19.500**	1.047**
Divorced	2.484**	4.341**	2.360**
Single (R)			
Education	-16.443**	-9.370**	-12.649**
Occupational prestige	7.155**	5.099**	9.390**

***** Differences between slopes are statistically significant at 0.05 levels.***

Table 23: Comparison of income attainment between immigrant women born in USA and women of third generation and over

Variables	Income	
	Born in USA	3rd+ generation
	B (SE)	B (SE)
Constant	8.972 (0.053)	9.630 (0.008)
Marital status		
Married	0.211** (0.037)	-0.052**[1] (0.006)
Divorced	1.781** (0.084)	0.117**[1] (0.016)
Single (R)		
Education	0.006 (0.008)	0.069** (0.001)
Occupational prestige	0.074** (0.005)	0.036** (0.001)
R^2	0.302	0.083
Model F	167.139**	2506.344**
Df	4 & 1549	4 & 110,576
N	1554	110,581

** Significant at 0.05 levels, **significant at 0.01 levels*

[1]Difference between slopes of income (column 2 and column 3) is statistically significant (t-test, $p<0.05$).

Table 24: Comparison of income attainment between immigrant women born in Europe, and women of third generation and over

Variables	Income	
	Born in Europe	3rd+ generation
	B (SE)	B (SE)
Constant	9.396 (0.067)	9.630 (0.008)
Marital status		
Married	0.105* (0.049)	-0.052**[1] (0.006)
Divorced	0.569** (0.105)	0.117**[1] (0.016)
Single (R)		
Education	-0.073** (0.009)	0.069** (0.001)
Occupational prestige	0.031** (0.007)	0.036** (0.001)
R^2	0.013	0.083
Model F	28.721**	2506.344**
Df	4 & 8464	4 & 110,576
N	8,469	110,581

** Significant at 0.05 levels, **significant at 0.01 levels*

[1]Difference between slopes of income (column 2 and column 3) is statistically significant (t-test, $p<0.05$).

Table 25: Comparison of income attainment between immigrant women born in Asia, and women of third generation and over

Variables	Income	
	Born in Asia	3rd+ generation
	B (SE)	B (SE)
Constant	9.037 (0.049)	9.630 (0.008)
Marital status		
Married	-0.322** (0.043)	-0.052**[1] (0.006)
Divorced	-0.389** (0.133)	0.117**[1] (0.016)
Single (R)		
Education	-0.007 (0.006)	0.069** (0.001)
Occupational prestige	0.060** (0.005)	0.036** (0.001)
R^2	0.014	0.083
Model F	55.201**	2506.344**
Df	4 & 16,041	4 & 110,576
N	16,046	110,581

** Significant at 0.05 levels, **significant at 0.01 levels*

[1]Difference between slopes of income (column 2 and column 3) is statistically significant (t-test, $p<0.05$).

Table 26: Comparison of income attainment between immigrant women born in Africa, and women of third generation and over

Variables	Income	
	Born in Africa B (SE)	3rd+ generation B (SE)
Constant	9.256 (0.052)	9.630 (0.008)
Marital status		
Married	-0.001 (0.041)	-0.052** (0.006)
Divorced	-0.843** (0.100)	0.117**[1] (0.016)
Single (R)		
Education	-0.007 (0.007)	0.069** (0.001)
Occupational prestige	0.092** (0.006)	0.036** (0.001)
R^2	0.153	0.083
Model F	114.849**	2506.344**
Df	4 & 2549	4 & 110,576
N	2554	110,581

** Significant at 0.05 levels, **significant at 0.01 levels*

[1]Difference between slopes of income (column 2 and column 3) is statistically significant (t-test, $p<0.05$).

Table 27: Comparison of income attainment between immigrant women born in Other, and women of third generation and over

Variables	Income	
	Other foreign born	3rd+ generation
	B (SE)	B (SE)
Constant	9.472 (0.037)	9.630 (0.008)
Marital status		
Married	-0.280** (0.034)	-0.052**[1] (0.006)
Divorced	-0.062 (0.058)	0.117**[1] (0.016)
Single (R)		
Education	-0.003 (0.006)	0.069** (0.001)
Occupational prestige	0.059** (0.005)	0.036** (0.001)
R^2	0.040	0.083
Model F	68.687**	2506.344**
Df	4 & 6,548	4 & 110,576
N	6,553	110,581

** Significant at 0.05 levels, **significant at 0.01 levels*

[1]Difference between slopes of income (column 2 and column 3) is statistically significant (t-test, $p<0.05$).

Table 28: Educational attainment of 30-year-old immigrant women of visible minority

Variables	Model-1 B	Model-2 B	Model-3 B	Model-4 B
Constant	13.977	13.689	17.550	14.738
Age at Immigration (Child=1, Teen=0)	1.354**	1.419**	1.414**	1.445**
Marital Status				
Married		0.452**	0.456**	0.469**
Divorced		0.530**	0.502**	0.242
Single (R)				
Fathers' education			0.286**	0.382**
Language proficiency				1.976**
R^2	0.046	0.051	0.053	0.124
Model F	476.244**	177.211**	137.224**	276.106**
Df	1 & 9,797	3 & 9,795	4 & 9,794	5 & 9,793
R^2 change		0.005	0.002	0.071
F test for R^2 change		26.457**	16.424**	787.554**
Df		2 & 9,795	1 & 9,794	1 & 9,793
N	9,799	9,799	9,799	9,799

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 29: Occupational prestige of 30-year-old immigrant women of visible minority

Variables	Model-1 B (SE)	Model-2 B (SE)	Model-3 B (SE)	Model-4 B (SE)
Constant	6.524	6.824	3.740	5.773
Age at Immigration (Child=1, Teen=0)	0.930**	0.818**	0.846**	0.136**
Marital status Married		-0.292**	-0.305**	-0.442**
Divorced		-2.075**	-2.277**	-2.169**
Single (R)				
Language proficiency			1.489**	0.543**
Education				0.639**
R^2	0.013	0.023	0.045	0.239
Model F	110.186**	66.874**	98.720**	525.559**
df	1 & 8,355	3 & 8,353	4 & 8,352	5 & 8,351
R^2 change		0.010	0.022	0.194
F test for R^2 change		44.642**	189.727**	2132.148**
df		2 & 8,352	1 & 8,351	1 & 8,350
N	8,357	8,357	8,357	8,357

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 30: Income attainment of 30-year-old immigrant women of visible minority

Variables	Model-1 B (SE)	Model-2 B (SE)	Model-3 B (SE)	Model-4 B (SE)
Constant	9.948	9.948	9.951	9.654
Age at Immigration (Child=1, Teen=0)	0.169**	0.170**	0.135**	0.131**
Marital status				
Married		-0.003	-0.010	0.009
Divorce		0.033	0.032	0.122*
Single (R)				
Education			0.032**	0.004
Occupational Prestige				0.043**
R^2	0.006	0.007	0.014	0.034
Model F	52.330**	17.570**	28.679**	58.965**
df	1 & 8,355	3 & 8,353	4 & 8,352	5 & 8,351
R^2 change		0.001	0.007	0.021
F test for R^2 change		0.195	61.624**	177.681**
df		2 & 8,352	1 & 8,351	1 & 8,350
N	8,357	8,357	8,357	8,357

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 31: Educational attainment: Interaction of age at immigration and visible minority status

Variables	B	SE	R^2	Model F
Model-1				
Constant	12.764	0.235	0.066	470.423** (df=7 & 46,346) (N=46,354)
Marital status				
Married	-0.062	0.033		
Divorced	-0.641**	0.081		
Single (R)				
Fathers' education	0.064**	0.017		
Language proficiency	1.405**	0.027		
Child immigrant visible minority	0.570**	0.050		
Teen immigrant visible minority	-0.786**	0.049		
Child immigrant not visible minority	-0.169**	0.049		
Teen immigrant not visible minority (R)				
Model-2				
Constant	12.345	0.234	0.076	478.749** (df=8 & 46,345) (N=46,354)
Marital status				
Married	-0.071*	0.033		
Divorced	-0.674**	0.081		
Single (R)				
Fathers' education	0.024	0.017		
Language proficiency	1.333**	0.027		
Visible minority	-0.895**	0.040		
Child immigrant visible minority	0.857**	0.052		
Teen immigrant visible minority	-0.497**	0.050		
Child immigrant not visible minority	-0.717**	0.055		
Teen immigrant not visible minority (R)				

** Significant at 0.05 levels, **significant at 0.01 levels*

Table 32: Occupational prestige: Interaction of age at immigration and visible minority status

Variables	B	SE	R^2	Model F
Model-1				
Constant	5.760	0.088	0.218	1437.627** (df=7 &36,060) (N=36,068)
Marital status				
Married	-0.090*	0.041		
Divorced	-0.639**	0.096		
Single (R)				
Language Proficiency	0.311**	0.038		
Education	0.555**	0.006		
Child immigrant visible minority	0.659**	0.060		
Teen immigrant visible minority	0.344**	0.063		
Child immigrant not visible minority	1.484**	0.059		
Teen immigrant not visible minority (R)				
Model-2				
Constant	7.027	0.096	0.238	1407.319** (df=8 &36,059) (N=36,068)
Marital status				
Married	-0.110**	0.041		
Divorced	-0.713**	0.095		
Single (R)				
Language proficiency	0.196**	0.038		
Education	0.534**	0.006		
Visible minority	-1.538**	0.050		
Child immigrant visible minority	1.195**	0.062		
Teen immigrant visible minority	0.866**	0.064		
Child immigrant not visible minority	0.496**	0.066		
Teen immigrant not visible minority (R)				

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Table 33: Income attainment: Interaction of age at immigration and visible minority status

Variables	B	SE	R^2	Model F
Model-1				
Constant	8.928	0.027		
Marital status			0.052	330.958**
Married	-0.093**	0.023		(6 & 36,061)
Divorced	0.258**	0.054		(N=36,068)
Single (R)				
Occupational prestige	0.040**	0.003		
Child immigrant visible minority	0.925**	0.034		
Teen immigrant visible minority	0.793**	0.035		
Child immigrant not visible minority	0.872**	0.033		
Teen immigrant not visible minority (R)				
Model-2				
Constant	9.104	0.036		
Marital status			0.054	292.615**
Married	-0.095**	0.023		(df=7 &
Divorced	0.246**	0.054		36,060)
Single (R)				(N=36,068)
Occupational prestige	0.036**	0.003		
Visible minority	-0.223**	0.029		
Child immigrant visible minority	1.006**	0.036		
Teen immigrant visible minority	0.870**	0.037		
Child immigrant not visible minority	0.732**	0.038		
Teen immigrant not visible minority (R)				

** Significant at 0.05 levels,* ***significant at 0.01 levels*

Appendix A:

Occupational Ranking:

Occupations	R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9	R-10	Total	Ranking
Senior managers	8	7	9	8	10	8	9	5	10	8	**82**	**12**
Middle and other managers	6	6	7	6	9	6	8	5	8	7	**68**	**11**
Professionals	9	6	10	10	10	6	10	7	10	10	**88**	**13**
Semi Professionals and Technicians	6	5	7	7	8	5	8	6	6	9	**67**	**10**
Supervisors	5	4	6	5	8	4	7	5	7	6	**57**	**9**
Supervisors: crafts and trades	6	4	5	6	7	3	6	5	7	5	**54**	**8**
Administrative & senior clerical personnel	5	5	4	7	7	4	5	4	6	4	**51**	**7**
Skilled sales and service personnel	5	4	4	4	6	3	5	4	5	2	**42**	**5**
Skilled crafts & trade workers	4	5	3	6	6	3	5	4	5	3	**44**	**6**
Clerical personnel	3	3	2	5	5	2	4	4	2	-	**30**	**4**
Intermediate sales and service personnel	4	4	3	2	4	2	3	4	3	1	**30**	**4**
Semi-skilled manual workers	4	2	2	3	3	1	2	4	2	-	**23**	**3**
Other sales and service personnel	3	3	3	1	3	2	2	4	1	-	**22**	**2**
Other manual workers	3	2	1	1	3	1	1	4	1	-	**17**	**1**

NB: Higher value of ranking is associated with higher occupational prestige.

Appendix A (cont'd)

Please rank the following occupational categories in terms of their occupational prestige. Please place circle the appropriate scores

Occupation	Low prestige									High prestige
1. Senior Managers	1	2	3	4	5	6	7	8	9	10
2. Middle and other Managers	1	2	3	4	5	6	7	8	9	10
3. Professionals	1	2	3	4	5	6	7	8	9	10
4. Semi Professionals and Technicians	1	2	3	4	5	6	7	8	9	10
5. Supervisors	1	2	3	4	5	6	7	8	9	10
6. Supervisors: crafts and trades	1	2	3	4	5	6	7	8	9	10
7. Administrative & senior clerical personnel	1	2	3	4	5	6	7	8	9	10
8. Skilled sales and service personnel	1	2	3	4	5	6	7	8	9	10
9. Skilled crafts & trade workers	1	2	3	4	5	6	7	8	9	10
10. Clerical personnel	1	2	3	4	5	6	7	8	9	10
11. Intermediate sales and service personnel	1	2	3	4	5	6	7	8	9	10
12. Semi-skilled manual workers	1	2	3	4	5	6	7	8	9	10
13. Other sales and service personnel	1	2	3	4	5	6	7	8	9	10
14. Other manual workers	1	2	3	4	5	6	7	8	9	10

Appendix A (cont'd)

Detailed explanation of some of the occupational categories above

The above categories of occupation were followed to collect data for Census 2001. The National Occupational Classification (NOC) was developed by Statistics Canada and Human Resources Development Canada (HRDC). The following occupations are further explained for clarification:

Senior Managers: include legislators, senior government managers and officials; Senior managers-financial communications and other business services; Senior managers-health, education, social and community services and membership organizations; Senior managers-trade broadcasting and other services; Senior managers- Goods production, Utilities, Transportation and construction

Middle and other managers: include administrative services managers; Managers in Engineering, Architecture, Science and Information Systems; Sales, Marketing and Advertising Managers; Managers in Retail Trade, Food and Accommodation Services; Managers in Financial and Business services; Managers in Communication; Managers in Health, Education, Social and Community Services; Managers in Public Administration; Managers in Art, Culture, Recreation and Sport; Managers in Protective service; Managers in construction and transportation; Managers in Manufacturing and Utilities

Professionals: include Professional occupations in business and finance- auditors, accountants and investment professionals, human resources and business service professionals; Professional occupations in Natural and Applied Sciences-Physical science Professionals, Life Science professionals- Civil, Mechanical, Electrical and Chemical Engineers, Architects, Urban Planners and land Surveyor, Mathematics, Statisticians, and Actuaries; Computer and Information system professionals; Professional occupations in Health- Physicians, Dentists, and veterinarians, Optometrists, Chiropractors and other health diagnosing and treating professionals, Teachers and Professors; Professional Occupations in Art and Culture

Supervisors : include Sales and service supervisors; Contractors and Supervisors in Trades and Transportation; Supervisors in Agriculture, Horticulture and Aquaculture; Supervisors- Logging and Forestry; Supervisors- Mining, Oil and gas; Supervisors- Oil and Gas drilling and service; Supervisors in Manufacturing; Supervisors- Assembly and Fabrication

Appendix A (cont'd)

Occupational prestige

Occupational prestige	Ranked score	Frequency
High prestige	67-82 (range - 15)	4
Medium prestige	42-57 (range - 15)	5
Low prestige	17-30 (range - 13)	5